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THE SOUTHERN PLANTER,

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.—*Xenophon*.

Illage and Pasturage are the two breasts of the State.—*Sully*.

VOL. XI.

RICHMOND, JUNE, 1851.

No. 6.

P. D. BERNARD,

PUBLISHER AND PROPRIETOR.

TERMS.

ONE DOLLAR and TWENTY-FIVE CENTS per annum, which may be discharged by the payment of ONE DOLLAR only, within six months from the date of subscription. Six copies for FIVE DOLLARS; thirteen copies for TEN DOLLARS, to be paid invariably in advance.

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OBITUARY.

RICHARD BARNES GOOCH, the late Editor of this Journal, is no more. He died on the 13th ultimo, at Airfield, the residence of his mother, in the 31st year of his age: thus, in the spring time of life has he been taken!

He was a young man who, in his earlier career, gave tokens of high mental endowments and usefulness; was a Graduate of the University of Virginia, and when there, a mere youth, evinced his capacity as a writer in many interesting and able productions contributed to the "Collegian," a paper published under the auspices of the Students of that Institution.

After leaving the University he visited Europe. Several of his interesting letters written from thence will be recollected by our readers. They were published at the time in the "Richmond Enquirer," and elicited remarks of commendation for the beauty and simplicity of their diction, as well as for the critical and valuable information they contained.

The Orations and Addresses delivered by him on several occasions were evidently emanations from a highly cultivated mind—chaste in their composition and rich in historic and classic allusion: Although an impediment existed in his speech, rendering it unpleasant to him to join freely in conversation, yet upon these occasions, his language would flow smoothly and uninterruptedly, until his mind was relieved of its intellectual effort.

VOL. XI.—6.

He was particularly devoted to journalism, and to fill the Editorial Chair appeared to be almost the acme of his ambition. For nearly two years he filled the Editorial Chair of this Journal, with a spirit and ability which we believe gave entire satisfaction to our patrons.

He was a distinguished stenographer, having occupied that position as well in the Congress of the Union, as in the Legislature of his own State.

He was a man of sterling principles, but of extreme amiability of character. Affectionate and mild in his disposition, he offended no one. He had some faults, but who is without them?

In an early hour he has been cut off, regretted by friends and mourned by a fond mother, who dearly loved an ever kind and affectionate son. The grave closed upon his mortal remains amidst the roll of the drum and the booming of the cannon of his comrades in arms. They knew him well, and for his worth they valued him.

TO THE PATRONS OF THE PLANTER.

The publisher respectfully announces to his subscribers and the agricultural community, that he will continue the publication of the Planter on the same terms as heretofore. The unfortunate demise of its late Editor will occasion no interruption in its regular issue.—Arrangements are in progress to secure the services of a gentleman well qualified to take charge of the Editorial Department, which the Publisher hopes will be consummated in time for the issue of the next number; and he hopes, with the assistance of the valuable aid of the new Editor and others, to make such improvements as will meet with favor from his patrons, and place it in the front rank of the Agricultural Journals of the country.

John F. Smith

He would take this occasion to acknowledge the kindness of those of his friends who have generously tendered their assistance to him until he could complete his arrangements for the future Editorial conduct of the journal, and assures them that their kindness is duly appreciated.

To his subscribers who have stood by him in his efforts to sustain an Agricultural Journal in *Virginia*, he would ask of them a continuance of their patronage, assuring them that his best energies shall be exerted to give them such a publication as will meet the wants and justify the expectations of the farming interest.

✂ Editors who favor us with an exchange will please publish the foregoing in their respective journals.

ARTIFICIAL MAHOGANY.

The following method of giving any species of wood, of close grain, the appearance of mahogany in texture, density and polish, is said to be practised in France with such success that the best judges are incapable of distinguishing between the imitation and mahogany. The surface is first planed smooth, and the wood is then rubbed with a solution of nitrous acid. One ounce of dragon's blood is dissolved in nearly a pint of spirits of wine; this and one-third of an ounce of carbonate of soda are then to be mixed together, and filtered, and the liquid, in this thin state, is to be laid on with a soft brush. This process is to be repeated, and in a short interval afterward the wood possesses the external appearance of mahogany.—*N. Y. Agriculturist*.

GROUND FOOD FOR STOCK.

Few persons seem to be aware of the importance of grinding every variety of grain, before feeding it to animals. In fattening any kind of animals, it is all important. There is no animal's stomach that can digest any variety of grain with a cortical covering. All animals that swallow a single kernel without crushing, void it whole; and what is singular, after passing the ordeal of the gastric juice, the heat and digestive organs of the stomach, and the whole intestinal canal, the seed will still germinate and grow. Horned cattle are not careful chewers of their food, as they depend upon rumination to comminute their food properly, in which grain, meal and roots are never brought up to undergo that process. The hog is a notorious gormandizer, and scarcely chews at all; and it is said that if three hogs confined in a narrow stall, and only the first one fed what corn he can eat, the middle one will fat-

ten fastest, and the last one keep in good order. The horse masticates better, but age and hard fare often disable him from performing such duty as is required to render his food fit to produce the nutriment it contains.

The stomach is a masticating vessel where all the food is intended to be dissolved, and its nutritious parts to be taken up and carried to the blood, to be distributed and deposited on all the tissues. The period that all particles take in dissolving, is exactly in proportion to their bulk. A cube of salt or loaf sugar, if divided into two, will dissolve in water in half the time it would whole; as will metals in acids, or ice in the sun.

In every point of view, therefore, either for profitable expenditure or the speedy fattening of animals, the grinding and comminuting the food has nearly one-half the advantage over the ordinary process; and if cooked, saves the stomach, and its complicated organs and nerves, the exertion of cooking it there—as cooked, it has to be, before digestion. It is the opinion of close observers that fully one-half the expense of sustaining and fattening is saved.

In feeding horses or cattle, for simply carrying them through the winter, if what grain they are entitled to was ground and their hay or straw cut, mixed and properly moistened, the saving would amount to quite an item—every inch of hay or straw would be eaten and nothing lost. Two-thirds the quantity now fed in racks for the horses to pull under their feet, and that fed to cattle on the ground, and trodden down and spoiled, would suffice to carry stock through the winter. But habit is everything; it is stronger than the ties of family affection, the good will and confidence of the world, or the hopes of salvation, as is evinced by the inebriate—and it holds good in all the duties and actions of life. If we had been habituated from youth to cut, cook and prepare food for our valuable animals, the most beneficent gifts of the Creator, should we not look with astonishment at the practice of waste and mismanagement now in general use?

In England, where necessity teaches people wisdom—where ten to twenty dollars rent is paid for an acre of land—they manage things differently. In that country, where the best work horses in the world are kept and the fattest animals sent to market, every particle of food is cut and ground; and horses' food often baked into loaves. Their experience has settled the most economical process and necessity enforces it. Our whole system of feeding is wrong. The under-cover stall feeding is the only true one, both as respects the saving of provender, the comfort of the animals, and the value of the manure.—*Rural New Yorker*.

TO KEEP DOOR KNOBS CLEAN.

Ladies are very fond of keeping the door knobs, spoons, plates, &c. in brilliant order. Now if, instead of water and chalk and such

preparations, they will use camphine and rotten stone, a far brighter, quicker and more durable polish will be attained.—*Exchange.*

HOW CATTLE KILL TREES.

It is a noticeable fact that a tree ever so thrifty and of whatever kind, to which cattle gain access, and under which they become habituated to stand, will very soon die. In the case of a solitary shade tree in a pasture, or by the road side, this is of common occurrence. The query may have been suggested, to what this is owing. In the first place rubbing a tree by the necks of cattle is highly pernicious, and if persisted in it will commonly destroy them sooner or later; but if the body of the tree be cased so that their necks cannot touch it, death will ensue just as certain if they are allowed to tramp the earth about it. But why should tramping the earth destroy the tree? The reason is one of wide and important application to the laws of vegetable growth? The roots of plants need air, if not as much, yet just as truly, as the leaves and branches. Their case is analogous to that of fishes which though they must have water must have air also, viz: just about as much as permeates the water. If it be all shut off, so that none which is fresh can get to them, they will exhaust the supply on hand, and then die for want of more.

So the roots of trees and vegetables want air. When the earth is in a normal or natural condition it is full of interstices and channels by which air gets to them. But if the cattle are allowed to tramp down the earth, and the sun aids their work by baking it at the same time, a crust like a brick is formed, wholly impervious to the atmosphere, and the tree yields to its fate. So a tree cannot live if its roots are covered with a close pavement. They will struggle for life by creeping to the surface and hoisting out a brick here and a stone there, or find a crack where their noses can snuff a little breath; but if fought down and covered over will finally give it up. So if a tree be thrust into close clay, or its roots are kept under water, it refuses either to be an aquatic or to put up with its alreminous prison. It will grow as little as possible and die the first opportunity.—*Prairie Farmer.*

THE VALUE OF CARROTS.

Very few persons are aware of the fact that young carrots are among the most wholesome of vegetables and greatly assist digestion. French cooks, in many of their stewed dishes, introduce small slices of young carrots and the *Julianne* soup, so common on every French table, is seasoned with finely chopped vegetables—young carrots being the most impor-

tant, and the difference in digestion between a dinner eaten at a French *café* and an English hotel is not alone in the cooking but in the vegetable condiments introduced. It is only lately that the chemists have explained the digestive stimulus known to exist in the carrot to consist in a peculiar acid—found in this vegetable.

After saying so much with a view to the promotion of a better understanding with the carrot in our kitchen gardens, we quote the following in corroboration from the Working Farmer, calculated to increase the field cultivation of this useful vegetable.

"Two bushels of oats and one of carrots are better for food for a horse than three bushels of oats; and when used for light work the quantity of carrots may be increased. With such food, horses will enjoy good health, a loose hide, shining coat, and improved digestion.

It may be thus explained; the carrot is very nutritious, and, in addition, has the curious property of gelatinizing the watery solutions contained in the stomach of the horse. Carrots contain *pectic acid*, a single drop of which mixed with the juice of an orange or other fruit immediately turns it into a jelly, and the Paris confectioners use it for this purpose. Soups in which carrots have been boiled are always gelatinous when cold, and are more easily digested when used as food than soups otherwise made.

"The bene plant has similar properties. A thin slice of this plant thrown into a glass of water renders it ropy and and gelatinous, and for this reason it is a specific for summer complaint with children.

"By examining the dung of a horse fed in part on carrots, it will be found to contain no undigested hay or oats, and therefore less quantities of those materials are necessary than when half the amount swallowed is parted with in an undigested state. For fattening animals, the carrot is equally valuable, and for milch cows they surpass any other food. The milk of a cow at mid-winter fed on carrots is equal in flavor to that supplied from clover in summer, while the butter made from the milk is finely colored and highly flavored.

"In soils containing proper proportions of bonedust, sulphuric acid, potash, and common salt, 800 bushels of long orange, or 1,100 bushels of white Belgian carrots may be easily raised per acre, while the same land will not produce one-tenth the quantity of oats. We have sold our crop of carrots this year to the livery stable keepers of Newark at fifty cents per bushel, and we could have sold a thousand bushels or more at the same price."—*Downing's Horticulturist.*

Wealth, too often, is only a barrier to the temple of real greatness—but poverty is often the mother of genius.

For the Southern Planter.

CASTRATION OF COLTS.

Mr. Editor,—I perceive in your last, *March* number, a remark addressed to me on the subject of the castration of colts. I aver my only object was to benefit the community. I am truly sorry that any act of mine should be the cause of injuring my neighbor. I say now, it is the opinion of experienced operators on the plan I advised, that there is some mistake in the way. I have just been looking over my files, and I think I have seen something like a mistake. His article is dated 11th February, 1851. He says, "In a number of your last year's volume." Now, I have not found it in any number of 1850. I think, if I have read my article right, I stated that in my plan, in substance, not to exceed the tenth day. The gentleman says from the twelfth to the twentieth day. I have never castrated but one over the eighth or ninth day until they were two years old or over; that was about two weeks old. I do not think I ever had as much difficulty with any horse or mule two years old or over in my life. I threw him some four or five times before I could secure him. He was so active and quick that after throwing him, he would extricate himself before I could secure him. I resolved never to operate on another again after the eighth or ninth day, at which age a couple of men take hold of them and lay them down, and easily hold them. It is well known that colts fatten, grow, and strengthen every day immensely; several days make great change in appearance and strength. So it was with the one mentioned above. He was almost exhausted before I finally confined him. I say it as a stubborn fact, I never knew or heard of any mule or horse colt that died from the operation on the plan I advised. I say, further, they rarely appear to mind it at all.

Permit me to give you the opinion of others—those that can be relied on. They state it as a known fact, that a rupture always takes place in the act of castration; and that no rupture can possibly take place after castration unless it is forced by extraordinary and excessive fatigue.

Let me state a piece of information I received from an old and experienced operator. Previous, or about the time I first began to castrate colts, I purchased a young horse that had been castrated, as reported. Soon after I owned him I found he had one seed remaining. I went to the old gentleman and asked him why he left one seed. He replied, I commenced in my early days to castrate; I was very successful: never lost a colt or mule, going far and near and castrated so many, I thought myself perfect, but at length the time came, one died. I was much more careful, I lost another and another; I then determined to examine closely the structure of every one after I got them confined before I commenced.

I have learned by experience that it is impossible to take out a seed in some without producing a rupture, and if I had taken out the other seed in that colt he certainly would have bled to death. He then advised me to examine carefully the formation, and I would find, on close examination, that when there was a slight contraction any way in its connexion with the other muscular ligament of the animal a rupture would almost invariably take place; but I have learned from another operator a remedy I have not yet known to fail. We have prepared a parcel of finely powdered alum at hand—*take care it is very strong alum*. Whenever there is the least appearance of a rupture, or the blood flows too freely, we immediately apply the alum. So soon as the blood is stanchd we proceed with the operation. The last colt I had castrated the alum was freely and plentifully applied four or five times before the blood could be stanchd, and a finer colt I defy the county to produce, of his age. I had supposed that the thing had become so generally known that all operators used it at this day.

I say, again, I am truly sorry for the loss that those persons have sustained, and hope the plan I recommended will have no further influence on them, and that they hereafter pursue their own safe and careful plan; but at the same time, I assure you, so perfectly satisfied are not only myself but others of the great advantage and success of the plan I recommended, that we are resolved not in the least to change.

JAMES CHOWNING.

Prospect Hill, Lancaster, April 25, 1851.

From the Alabama Planter.

CHILIAN CLOVER.

I removed to Florida from the Piedmont region of Virginia, which is the best grass and grazing portion of the State, and brought with me the best varieties of grass seed. But I was unsuccessful in all the experiments that I made, and was driven to the conclusion that none but the native grasses would suit the soil and climate of Florida.

In the spring of 1847, Mr. Senator Westcott, of this State, sent me, in a letter, a few of the Chilian clover seed, which he obtained from the Patent Office at Washington. But having failed in all my experiments to introduce the exotic grasses into Florida, I paid very little regard to it, and very carelessly scattered the seed in my fruit and shrubbery garden, on a square which is light and sandy, and too poor to produce good vegetables. No further notice was taken until the fall, when I discovered that the young plants were growing very finely, but the gardener, in chopping up the weeds and other grass which had sprung up, had destroyed much of the young clover. I then

began to pay some attention to it. It grew well during the winter.

The next year it continued to grow in the hottest and driest time of summer. Last year it grew to the height of two feet or more, and the bunches were large and luxuriant, and it was in blossom all summer; but I did not secure any of the seed.

It is a species of lucerne—has a blue or purple blossom, putting out at the end of the branches, and unfolding every day, as the branch continues to grow, so as to resemble a feather. Consequently the seed are ripening whilst it is in bloom. With a view of securing the seed this year as well as I could, I had the old stalks cut off on the 1st of April last, and by the 1st of May it was fully knee high, and very luxuriant and succulent, during which time I do not think a drop of rain fell upon it. We have no rain in this part of Florida from March till June. As the seed ripened, I had them picked off by hand, and succeeded in procuring about a pint, which I have distributed in proportions of about a tea-spoonful, having been applied to for small quantities by gentlemen in Tennessee, Alabama, Mississippi and Louisiana, to all of whom I have sent some by letters.

It is unquestionably a valuable grass for the climate and soil of Florida, growing well on light sandy soil, and withstanding our hottest and driest weather, which is sometimes very trying. It also continues to grow in winter, and has never been affected by any frost we have had. This is the fourth year it has been growing on the same piece of ground without any renewing, and it is more luxuriant this year than at any previous time. After gathering as many seed as I could, I had the old stalks cut off on the first day of July, near the ground, and in three days it had grown to the height of six inches. It is now in blossom, and I shall save all the seed I can get until fall. The greatest difficulty seems to be in securing the seed in sufficient quantity for any useful purpose, unless some method can be devised which I have not thought of. Probably seed in sufficient quantity might be obtained through our Consul at Chili.

I believe a field once set with this clover or lucerne, would last for many years; and from my experience, would prove as valuable in the southern portion of the United States as it is in Chili.

THOMAS BROWN.

TO DRESS RICE.

Cottom's Almanac contains the following recipe:

"Soak the rice in cold salt and water for seven hours—have ready a stew pan with boiling water, throw in the rice and let it boil briskly for ten minutes; then pour it in a cul-

lender: cover it up hot by the fire for a few moments, then serve. The grains are double the usual size, and quite distinct from each other."

For the Southern Planter.

THE USE OF GUANO.

Mr. Editor.—Having used guano for many years, and thinking, from what I hear, that there is danger to be apprehended from many who are buying it freely and using it incautiously, thereby prejudicing those who are still sceptical against its use, I will (if you think them worth publication) give my views on the subject. All who have used guano know, from its effects, that it is a stimulant of the highest class, and that its constituents act powerfully on soil. When, therefore, a large quantity, say two hundred pounds to the acre, is applied, the land, though poor, produces a large crop, but afterwards shows no progressive improvement; hence the objection is so often made to it, as wanting durability.

An analysis made by Professor Johnson in 1832, has governed my use of it. By that the muriate and phosphate of soda and the phosphates and carbonates of lime and magnesia, exceed by a fraction seventy-four parts in a hundred, and I think from the same analysis, the salts of ammonia and the organic matter might be set down at sixteen. Here is food for plants cooked and seasoned; and at the same time producing a chemical action on the soil, that enables it, (by the alkaline basis of the salts making the insoluble mould soluble) to offer to the growing crop every element of fertility it possesses.

Now, sir, from this statement of the case ought it to surprise any one that the first crop on poor land, if the season is favorable, takes up all the organic matter of the guano, as well as that contained in the land. For land is called poor because it does not produce, although it may be filled with insoluble geine which requires the chemical action of carbonates to make it soluble; the alkaline bases of the salts in guano will produce the same chemical action. This explains the cause of guano acting more powerfully on poor than on rich land. Manures are valuable in direct proportion to the geine or its elements they contain. Dr. Dana estimates the soluble geine in guano at twelve per cent. That large crops can and will be made by its use, and the land improved, I have no doubt. For several years I have cultivated ten acres of the poorest land in Prince George without lime or anything but guano. In 1845 I fallowed and dressed with two hundred pounds of African, (an inferior parcel of that inferior deposit.) It produced eighty-three bushels of wheat. In 1847 I fallowed it again and sowed it at the rate of one bushel to the acre, as I had done before. The fallow was from drought so late

that I had no expectation of a good crop. It brought fifty-five bushels. In the spring of 1848 I sowed it in oats, and after harvest followed it, dressed with one hundred pounds of Peruvian. The crop was not measured; the average of the whole field was eight, within a very small fraction—the guano land best to the eye; I, therefore, call it eighty bushels. The three crops added together amount to two hundred and eighteen bushels, and brought, in money, two hundred and thirty dollars. I gave for the land five dollars an acre, and the guano used in the two dressings, cost, all expenses told, sixty-three dollars—making the purchase and improvement one hundred and thirteen. Three crops have, therefore, returned me my purchase money and all the costs of improvement, with one hundred per cent. interest, to say nothing of the oats. The land is now in corn with one hundred Peruvian in the hill, and if the season is favorable will bring at the least four barrels. After the application of the African guano, I determined never to use more than one hundred of Peruvian to the acre, for my patient was weak, and I adopted the plan of physicians and gave broken doses. I have a field in wheat now dressed with only eighty pounds: a part of the field has had one hundred applied to the two crops of corn made on it in 1848 and 1850. If the crop (although it follows corn) could at present, from its appearance, indicate the yield of the harvest, I should expect nine or ten bushels. To me it has been a matter of some moment, to find out, by practice, what amount of farm pen manure would equal one hundred pounds of Peruvian guano. The appearance of the growing crop of wheat would lead to the conclusion that it is equal to fifty one-horse cart loads. I do not think I have ever manured an acre of land with putrescent manure at a less cost than seven dollars and a half, if the labor is to be charged at the rate of hired labor. Some late experiments with swamp mud have satisfied me that one hundred pounds of Peruvian guano, in compost with fifty cart loads of swamp mud, would produce a manure equal in value to one hundred carts loads of pure cow dung.

Yours, very respectfully,

JOHN P. BOLLING.

Petersburg, May 3, 1851.

We hope our correspondent will continue his remarks on this important subject.

OVER-CROPPING.

"This is the leading vice of agriculture in this portion of the Southern States. The small and neat farm—that is, the farm small enough in all its arrangements for the management of

the force which cultivates it—is the 'angel's visit' of Southern husbandry. One meets with but few such farms, and meets with them far apart. Instead of farms where every thing appears in complete order and arrangement, one often meets with those wide-spread tumble-downs, where disorder and derangement are tumbled together in every variety of condition; and this arises principally from over-cropping. The maxim of agriculture, that the productions of the earth must ever be in proportion to tillage, seems generally to be neglected, or not known in this part of the State; for, to frame a maxim from the system mostly pursued, the productions of the earth are in proportion to the quantity of surface to which the appearance of tillage can be given. In every department of agriculture our whole section of State is in a condition of comparative infancy. Can it be said that the production of any article is carried up to the capability of the soil and climate? The farmer who throws into the shape of cultivation a wide surface which he merely ploughs and boes, while his mind is as free as vacancy from any thought about the nature of the soil, which he takes as nature gives it, and of the different circumstances of climate that may weary his labors and shorten his crops through the existence of some radical deficiency in the soil, or in the system of culture, may say he raises what he consumes, and sometimes what he sells; but he owes to God more thanks for a good season than he owes to himself for the exercise of skill and judgment. To obtain as much as possible from the number of acres one man can cultivate, and to cultivate no more than may be made to yield the most profitable quantity it is capable of yielding, should be strictly regarded by every farmer as the worthiest object of his study and his labor; for the best course of preparation, the best adaptation of soil which the manoeuvres of cultivation can oppose to the vicissitudes of climate, and the perfect quantity and best quality of that quantity per acre, must remain unknown and unenjoyed until we become content to cultivate less space, and to exert in the premises more practical science and experimental knowledge. A heavy crop from a high state of fertility and cultivation is always the only advantageous one. It shows the skill and industry properly applied, of the farmer who produces. It shows the practicable extent of agricultural development. In short, it is an example creditable and profitable to him who exhibits it—worthy of imitation and rivalry, and highly beneficial to the agriculture of the State. No farmer complains of this kind of a heavy crop; it is a real benefit and source of much pleasure. But a crop which is a heavy crop because it occupies a greater number of acres than the cultivator can manage, under a system of culture thoroughly adapted, is commonly no better than the wilful cultivator of such deserves to have."—*Mobile Tribune.*

For the Southern Planter.

FARMER'S STATE CLUB—ERRATA.

Mr. Editor,—In the March number of the Southern Planter, is an abridged account of the proceedings of the Farmer's State Club, which met in the Senate Chamber, on the 20th of February. You have done me the honor to report some of my remarks on that occasion, and also to attribute to me some statements which I did not make. In the confusion of conversation, I am not surprised that such mistakes should have occurred. But as some of these statements may mislead others, and some even do injustice to an individual, and produce an erroneous impression as to a very useful machine, I have thought it necessary to ask their correction.

The general result of my remarks as reported, in reference to Sinclair's Wheat Drilling Machine, is very unfavorable, and farmers might well be deterred from using this machine, if they had confidence in these statements. The truth is, my opinion is favorable to the machine. I purchased it last Fall, and put in most of my wheat with it, giving at the same time, much of my own attention to the working of it. In clean land, well prepared, the work was beautiful. This is true of fallow, as well as corn land. The wheat now speaks for itself, and is certainly more uniform than I have ever had it before. I incline to think it is also more vigorous on account of the protection afforded against the winds of Winter, by the ridges thrown up by the drill.

The advantages of the drill are, uniformity in the sowing of the wheat, and also, in the depth at which it is deposited. There is also the further advantage just referred to, in the protection of the ridges. At the same time it is necessary to say, there is not that perfect uniformity I had anticipated. Where the land is foul, the tines are constantly collecting on their points little bunches of grass, which receive the wheat and leave it in little heaps, instead of being diffused along the drill. Again, it sometimes happens that the wheat is pressed in some of the chambers and becomes so compact, (especially if it is at all damp,) that it does not fall out on the revolution of the wheel. These are the drawbacks, and the same I believe, pertain to all wheat drilling machines. Yet, in spite of these objections I shall continue the use of the drill, and I should be very unwilling to be without it. In foul land, I shall hereafter raise the tines and scatter the wheat without drilling it.

I should be very sorry if any one were prevented from liming his land by any reported statement of mine. I believe in the tide water section of Virginia, it is the basis of all improvement, the corner-stone of every system of successful farming. The want of sufficient lime, seems the radical defect of our soils. All the manure of earth, would not

make them rich, unless it contained lime. Fortunately all our stable-manure, farm-pen manure, ashes, guano, and indeed all the fertilizers that I know of, do contain lime; but unfortunately not a sufficiency to supply the wants of our soil. I have been using it thirteen or fourteen years. I generally apply it in the Spring to my corn land after it is ploughed up. Usually, I see but little effect of it on the first crop of corn. The larger the amount of vegetable matter in the soil, the greater the effect perceptible. On the wheat crop, there is more improvement. And in the next rotation, the results are more striking. But the great important consequence of lime, is to enable the farmer to make clover on our lands. That secured, a fertile soil is within his reach.

I have now before me a beautiful example of the effect of both lime and guano. Three years ago, I applied fifty bushels of lime per acre, to a field of corn in the Spring. In the Fall, I gave to two acres of that land, two hundred pounds of Patagonian guano per acre and put the whole of the field in wheat. In the Spring following, I sowed clover on the part which had been guanoed, and some portion of the adjacent land. The wheat looked much better during the winter and early Spring on the two acres, but as the season advanced, it suffered for rain and lost its bright green color. The soil is light. When it was reaped, the two acres produced very little more wheat than the same quantity of the adjacent land. Thus far, the experiment seemed very unfavorable. But the clover took well, and the year just past, I cut from the two acres a most luxuriant crop of clover. That on the land adjoining, was not worth the cutting. The second crop of clover was a good one, and that I fallowed in last Fall, and put the land again in wheat. Now, the wheat on those two acres, is one hundred per cent. better than that on the land by the side of it, which was equally limed, and of the same fertility.

This experiment is valuable, as affording strong evidence of three propositions. First, that guano is not so evanescent as it has generally been believed to be. Secondly, that on light poor land, lime and guano may be relied on to produce a good crop of clover. And thirdly, that lime alone on such a soil without any assistance, can not be expected to produce good clover; certainly not, in the first rotation.

But it may be asked if the guano alone would not have made this crop of clover without the lime. I think not. Both experience and theory lead me to a different conclusion. But my observation as to this point has been limited. As to the rationale of the subject, we know that clover rejoices in lime, feeds on it, assimilates it. We know equally well, it has a strong antipathy to *sorrel* and usually flees from it; abhors an acid soil, and luxuriates in the calcareous. Guano does not contain enough lime, in the small quantity generally applied, to correct the morbid acidity of

our soils, to furnish an abundance for plants or to prevent the growth of those acid nuisances, the spontaneous production of our lands. But one fact is worth a dozen "*a priori*" arguments. It is in default of well ascertained facts, I give you the argument:

But I have wandered far from my object. I introduced the subject of lime, merely to correct the statement imputed to me, that I had never seen any effect from it within five years of the time of the application.

One more correction, Mr. Editor, and I shall have done. I hope to be excused for discovering so many *errata*. I doubt not Sir, there were "too much noise and confusion" to hear distinctly.

In your report of the proceedings of the State Agricultural Society, it appears that as Chairman of Committee appointed on my motion, I submitted a report to an adjourned meeting, containing a project of the best mode of applying Legislative Aid to Agriculture. And it would seem from your account of the proceedings, that this project was rejected and a substitute offered by Mr. W. H. Macfarland, adopted.

As I understood the proceedings, my project was adopted unanimously, and at the same time the objections made by Mr. Macfarland to its being presented to the Legislature in the form of a bill already prepared for their action, were also sustained. Mr. Macfarland's objections went exclusively to the form and not to the substance. I had no disposition to insist on the form. In that state of things the report was referred back to the same committee, with instructions to change the form, but to present the identical project to the Legislature. It is certain that this was done. As Chairman of the Committee, I placed the original draft in the hands of a distinguished member of the House, who framed a bill embracing all the features of the scheme, and it is now the law of the land. I have not seen the bill since it received the assent of both Houses, but I understand the only change of any consequence, is in striking out one of the chemists.

With my best wishes for the success of your Southern Planter,

I am yours,

Very respectfully,

WM. BOULWARE.

From the Germantown Telegraph.

THE POTATO ROT.

Mr. Editor,—Allow me a short space in your paper for some remarks on a subject of deep interest to all classes of society in our own and other countries. Although many discoveries of the *cause* of the potato rot, and many *remedies* for the same, have been presented through the press to

the public during the last three or four years, the high price of potatoes during the past winter and at this time, and the fact that the Legislature of Massachusetts within the last few weeks have offered a premium of \$10,000 to any one in that State *for a remedy*, is pretty strong evidence that the true cause of the disease and the proper remedy are not among those discoveries. The *cause* is undoubtedly the same in all localities, North, South, East and West; and the remedy must be just as universal—otherwise it is *not* a remedy.

Now I undertake to say, and will hereafter *prove*, to the satisfaction of every farmer in the Union, if he will apply the test which I am about to propose, that the disease originates in the deficiency of certain ingredients in the *soil*. The fact that millions of bushels (notwithstanding the loss of one-third or more of the crop by the rot,) of as good potatoes are grown every year in the United States as were ever raised before the appearance of the disease, affords to my mind, without more positive proof, sufficient reason to disbelieve the statement recently made, that the plant dies like an animal, in consequence of "*the feebleness of old age*." I shall not ask the Legislature of our State to give me ten thousand dollars for my discovery. I shall be amply rewarded if, on a fair and sufficient trial, it will settle the question. I shall not be alone if it be proved that I am mistaken; and as my remedy will add to the fertility of the soil in proportion to the extent it may be applied, no one can lose anything by the trial of it.

I therefore assert, as my firm belief, that *Charcoal, properly applied, will always, and everywhere, prevent the disease known as the "Potato Rot."*

In the next number of the *Telegraph* I will give directions in regard to the application of this remedy, so that, late as it is, many farmers can make a beginning this season. As I intend to prepare a treatise on this subject, to be ready for distribution after the harvesting of this year's crop, I will be greatly obliged to farmers and others who will try this test, to let me know the result as soon as convenient thereafter, so that I can give to the public as much information as possible respecting the utility of this remedy. In that work I shall review the "*discoveries*" heretofore made, and give the reasons why charcoal will prevent the disease, with all the useful information on the culture of the potato I

can obtain. It may require two or three trials to ascertain the quantity necessary to suit different soils and localities; and if in some instances it should fail on the first trial, I hope the industrious farmer will not charge the fault upon the remedy and abandon it, but try it again the next year; for I am confident that if properly applied, it is the remedy so much needed.

TRACY E. WALLER.

Rising Sun, Pa. March 31, 1851.

P. S. On account of the lateness of the season, I would suggest that farmers who may be induced to try the remedy I have proposed, prepare at once a compost for one-eighth of an acre (which will be sufficient for a trial for this year,) as follows:

Pulverized charcoal,	250 pounds.
Bone dust, or best guano,	25 "
Salt,	15 "

One large wagon load of wet and well rotted barnyard manure.

Mix well together and let it lay until time to plant, say two or three weeks.

DANFORD'S DOUBLE-SICKLED REAPER AND GRASS-CUTTER.

In a late number of the "Farmer and Mechanic" is a description of the above machine, which is said to have no superior as a reaper, and to stand unrivalled as a grass-cutter. The inventor claims, that it cuts all kinds of grain clean, and rakes it into suitable bundles—it will cut tame and wild grass of all kinds equally as short as when cut with a scythe. It is capable of cutting from fifteen to twenty acres per day.

"The advantages possessed by this machine are: It is simple and durable in its construction, and easy of operation; it cuts upon both sides of the grain or grass with an equal force, at the same time performs the cutting in a more natural and easy manner; it obviates all lateral or side shake upon the machine or horses, one sickle balancing the other, while it excludes all dirt or dust from the gearing and bearings, and prevents effectually the driving wheel from clogging, all the gears and wheels being tightly boxed."

The Editors of the Farmer and Mechanic say, "In proof of the satisfactory operations of the machine, we have seen numerous testimonials of its great value and efficiency from

those who have used it and fully tested its advantage."

We should like to hear further from those who have used this reaper, and also from the inventor, as to costs, &c. at this port. Indeed it would be to the interest of the inventor if he could exhibit its working on one of our neighboring farms.

We would be glad to furnish our subscribers with a cut of this machine, as well as of others. The proprietor of the "Southern Planter" has always desired to make every arrangement whereby his readers might be advantaged; and he has made the most liberal offers to the agricultural implement manufacturers of this city, to induce them to furnish the 'Southern Planter' with the means of presenting its readers with a representation of their inventions or articles of manufacture. We now again repeat the offer, and we by no means confine it to this city, but to the whole country. Upon being furnished with a suitable cut of any newly invented or well tried implement of agriculture, we will cheerfully notice it editorially, and give a free insertion in our pages; we could hardly be expected to do more; and we do hope that our offer may be met in the spirit in which it is made, and accordingly responded to.

TEMPEST PROGNOSTICATOR.

The Illustrated London News says:

"A philosophical invention from Whitby appears in the form of a Tempest Prognosticator, whose accuracy is said to have been tested by the storms of the last twelve months. Its inventor is Dr. Merryweather."

Of this invention the Farmer and Mechanic says:

"We have ascertained the above to be very correct, and that the apparatus is to be exhibited for the first time at the Great Exhibition, when a pamphlet will be published giving an account of the discovery. The disastrous storm of last month (October) was foretold by the Tempest Prognosticator, and communicated by letter to the President of the Whitby Philosophical Society fifty-one and a half hours before it took place."

Varro says, "it is the opinion of some that straw is called *stramentum*, because it is strewed before cattle."

A NEW FIRE ENGINE.

An ingenious Editor of Augusta, Georgia, has invented a new Steam Fire Pump or Engine, which is said by the Constitutionalist of that city, to perform wonders. By the use of this pump two streams of water can be thrown over the largest three story houses, and it will easily carry two powerful streams as far as the hose attached will reach, and lose none of its force. With two men to work it, steam can be raised, and the pump put in complete working order in two minutes.

PLUM ON THE WILD CHERRY.

The N. E. Farmer says that Mr. Wm. G. Churchill, of Deerfield, N. H. has had the green gage plum and the common cherry grafted into the pigeon cherry, on his farm, the former two and the latter three years' growth, and they are both in a flourishing condition. The Editor remarks:

"We have seen several varieties of the cultivated cherries growing in the pigeon cherry, (a very small red cherry,) but we never saw it used as stock for the plum."

THE BLACKBERRY.

Very few regard this shrub of the slightest value—It does, however, possess some qualities which entitle them to the attention of others than the mere passer-by—for instance:

"The blackberries have a desiccative and astringent virtue, and are a most appropriate remedy for the gums and inflammation of the tonsils."

"Boorhave affirms that the roots taken out of the earth in February or March and boiled in honey, are an excellent remedy against dropsy."

"Syrup of blackberries, picked when only red, is cooling and astringent, in common purgings or fluxes. The bruised leaves, stalks and unripe fruit, applied outwardly, are said to cure ringworm."—*Am. Farmers' Encyclopedia*.

KENTUCKY BLUE GRASS.

We understand that this grass is successfully raised in the neighborhood of Richmond. Will not our friend Dr. E. give us a word or two on this subject?

For the Southern Planter.

HORTICULTURAL REMARKS FOR JUNE, 1851.

PREPARED BY A. D. ABERNETHY, FLORIST, GRACE STREET, RICHMOND, VIRGINIA.

Little attention will be required in the flower garden this month, if the directions for May have been followed out. Tulips and hyacinths may be taken up about the end of the month, dried for a few days and afterwards kept in a cool place until October, when they ought to be planted out, but in a different situation from where they were the preceding season; if they are allowed to grow longer than two years in one place the blooms become smaller and lose their brilliancy of color. Roses may be budded this month—the best stock for this purpose is the common Maiden's Blush, or, as it is sometimes called, the Cabbage Rose. Many sorts bloom better in this way than on their own roots, such as "Paul Joseph," "Perpetual Red Moss," "Yellow Noisette," "Aimee Vibert," "Madame Leprer," and some others. As the process of budding is simple and is a ready means of improving the garden, we will give instructions for performing it: choose a smooth part of the stem, on the north side of the stock you mean to bud, then make a horizontal cut across the rind, quite through to the firm wood from the middle of the transverse cut, make a slit downwards, about an inch in length also through to the wood, then separate the bark from the wood on each side of the perpendicular slit, take the bud you mean to insert, and, with a sharp knife, begin about half an inch below the bud, continuing it with a slanting cut, about half an inch above the bud, which directly slip down close between the wood and the bark to the bottom of the perpendicular slit. If any of the bark attached to the bud should project over the transverse slit, cut it off, so as to make it fit neatly, and then tie the bud carefully, beginning at the bottom, leaving only the bud or eye out. In about three weeks, if the buds have taken, they will show signs of growth, take off the bandage, and when they have grown about two inches, you may cut off the head of the stock clear down to the bud. Cuttings of roses, pinks, geraniums and most greenhouse plants, may be made this month. In the kitchen garden sow tomatoes for a late crop, and towards the end of the month plant out cabbages for fall and winter use.

A degree of latitude is equal to a degree of Fahrenheit, and four hundred feet of elevation is the same. This fact will go far to enable us to ascertain important facts in relation to climate.

From the Virginia Advocate.

GUANO.

Mr. Editor,—Several weeks ago you requested all who had used guano to report the result. Last spring I purchased some; of which I put 200 lbs. on an acre of corn, first dropping the guano and covering it with dirt with the hoe, then the corn was dropped on it, and covered also with the hoe. The acre selected I thought the poorest in the field. The remainder of the field was planted with one bushel of gypsum and too of leached ashes, of which one-third of a handful was put to each hill of corn—where the land was thin more, and where it was rich less. The crop grew well, but I think the acre with the guano was the best all the year. The corn is not yet gathered; but I am satisfied it will not pay the extra price of the guano over the plaster.

I selected another acre in my tobacco land, with tobacco on each side—this acre was not manured with farm-pen manure, as each side was. The land was laid off both ways with the plough, and 200 lbs. guano put on it, a parcel in the centre of each square, and the hill made on it. All was planted at the same time, but where the guano was, the tobacco lived very badly. It commenced growing and then died, and did not continue to thrive till it was planted on the side of the hill. I think the acre made one-fourth or one-third less than an acre on either side. The tobacco on both the guanoed and manured land was plastered alike, but the tobacco on the guanoed land lacked weight, and resembled tobacco grown on this new land.

The acre on which the guano was put included a gully, which was filled several years ago with the dirt from the bottom of my ice-house, which dirt contains a larger portion of lime, than that near the surface. On this spot the tobacco was nearly a total failure. I tried some guano on tobacco at my mountain plantation, on thin land.—The crop was a little better, but not enough I think to pay the cost of the guano. Perhaps I should say that the season was a wet one, which is most favorable for the action of guano, if systematic writers can be relied on in this matter.

From the observations I have been able to make on my own land and that of others, I would say that guano, on land which contains lime, will act less beneficially, than on land which has no lime;

but of this my observations have been too limited to establish a principle. But I am satisfied of the fact that the Legislature should appoint an Agricultural Chemist, who is a practical farmer, and not a mere book chemist, however learned he may be. The appointment of such a chemist, whose duty it should be to examine the character of the soil in every neighborhood, and then give lectures at the Court house, free for every one to attend, would be of incalculable benefit to the agricultural community. It would perhaps take one ten or twelve years to go over the whole State in this way, at a cost of, say \$3000 each year; but it would be a great saving to the State. Perhaps the saving in the present *blind-fold use* of guano would more than pay the cost. I trust the Legislature will not continue the *hide bound, taxation policy heretofore adopted*, but while they are spending money on almost every else, they will patronize that also which is

The source of all wealth and domestic ease,
Pride of the land and patron of the seas.

CHARLES BROWN.

October 28, 1850.

From the Genesee Farmer.

POTATO CULTURE.

Messrs. Editors,—Many years since I discovered that new potatoes invariably set above the tubers, or seed planted, and in accordance with my knowledge of that fact, I commenced planting the potatoes as deep in the ground as I ever designed they should be at any time during the season of cultivation. The practice has thus far fully answered my expectations. I have for the past ten years invariably raised very good crops of fair sized potatoes, while many of my neighbors, tilling the same kind of soil, who have pursued the old method of hilling and tillage, have had lighter yields and smaller and inferior potatoes. I have found that the seasons of severe drouth have not as seriously affected my crops as those of others. I prepare the land for potatoes the same as for corn. I plant in hills three feet apart, and usually with a spade dig as deep as the ground had been ploughed, and, if a sod, I cut through it. The tops are longer in coming out of the ground, but as soon as out, I pass through the rows with a cul-

tivator, and with a hoe clean the hills. When hoed, I put the same composition in the hills that I use for corn, which greatly benefits the crop. I endeavor to keep the ground clean during the season. I have usually planted about the first of May, and dug and housed as soon as they were sufficiently ripe, and therefore have lost but few by the rot. I doubt not that if farmers would, where their soil admits, practise the level mode of culture, both with corn and potatoes, that they would generally be much better repaid for their labor. But enough upon this subject.

Now a word about sowing plaster. The use of it is rapidly increasing in the country, and consequently the best method of sowing should be adopted. It may not be known by all of the readers of the Farmer who use it, that sowing from a wagon is the quickest, easiest, cheapest and best method, where sown by hand. Place the barrel, or barrels, in a wagon, taking out a head. A man will sow it about as fast as horses usually walk, if he has a person to drive. By this means a ton can be very accurately sown in a few hours without much fatigue or suffering from the dust.

ORANGE H. WAIT.

Willoughby, Ohio.

From the American Agriculturist.

THE PHILOSOPHY OF HUMAN LIFE.

At fourteen years of age, I entered a dry goods store as a clerk. I had been a very active boy. The sedentary station, probably, caused me to become dyspeptic. I was troubled with flatulence and belching, and thought it useful to eat more to expel the air from the stomach. Physicians said I had consumption of the lungs, and ordered a low diet. After several years, without change, I thought they misunderstood my case. I eat more, and passed on to mature age, and was troubled, not only with flatulence and belching, but with much pain in the stomach also; and doctors advised me to take saleratus or soda, to neutralize the acid, and peppermint, to ease the pain. I followed this prescription, and continued to eat heartily. If I did not take regular meals, at regular times, I was cramped in the stomach, and suffered greatly. My countenance was pale and sickly, as usual. I continued this course without much change till about forty years of age. I then ruminated upon the subject and the thought occurred, that I eat more than the stomach could digest properly, which caused the pain and flatulence. I resolved, at once, to eat half meals, as an experiment. When I left the ta-

ble with half a meal, it was painful to my feelings. Between ten and twelve o'clock, I found it necessary to eat a crust or a cracker or two, till my stomach conformed to the change. I soon found that I had discovered the true cause of my ill health, and had no trouble of belching and pain in the stomach; and my countenance became healthy.

I required great watchfulness and self-denial, to leave the table with half a meal and a good appetite; but I persevered, and became confirmed and satisfied that I had adopted the true course. Half an hour after eating, when digestion has begun, the hungry feeling ceases; if not, eat a crust or a cracker or two, till the habit is fully established. This course I have pursued for the latter half of my years, and I have enjoyed improved health, vigor and comfort. I am obliged, however, to watch my appetite, and not indulge in it, for it would soon lead me astray, as I have found, when I have incautiously eaten a very little too much. I am not sensible that my faculties are impaired now, at fourscore years. If I take cold, it leaves me in a quarter of the time it did in early life. I formerly ate supper, and suffered if I did not get an early breakfast. I now take a light meal at tea, at five to six o'clock, and breakfast at seven to eight o'clock, without any inconvenience from hunger, after fourteen hours of abstinence. When I ate more, as I formerly did, if I lost a meal, I did not recover it for a fortnight. Now, if I lose a meal, I feel no cramp, and little inconvenience from it. This course has proved to me to be the true philosophy of life and health. Except for this, I should have been mouldering in the grave twenty years ago.

If the stomach is stimulated too high, by eating and drinking, it flags as much below when empty, and causes pain in both extremes. If you eat but little, the stomach is at ease and quiet. I drink water only; and do not use tobacco, nor any intoxicating liquors, nor any narcotics. I do not eat to feel any fullness, but merely to check the hollow feeling. If those who had suffered as I did, read this, and are willing to practise self-denial in eating, they may profit by it as I have done. The stomach should not be idle nor loaded, but uniform meals are the safest course. If necessary, eat two or three crackers between meals, till the habit of eating half meals is established. This is condemned by many—the error is in eating too large a lunch, and not by eating little. If you tell your friend that he eats too much, he is offended.

More persons die by eating and drinking too much, than from any other cause. Many would live on a hundred years, by this regimen, as the antediluvians did, who only ate vegetables. Children should be taught to eat as little as they will be satisfied with, and plain food will accomplish this best. If you are troubled with belching, it is a proof that you have eaten too much for the stomach to

digest properly. If the food is properly digested, the wind will pass down. Thus it is a good test.

I write this on the importunity of friends, who think others may profit by it. When I was a boy, there were no meat markets but in large cities, and every one provided salt beef and pork for the summer. They ate pork and potatoes one day, and potatoes and pork the next. Then they ate to live; now they live to eat, and must have delicacies from the four quarters of the globe for a meal.

DAVID TOMLINSON.

Schenectady, Nov. 1850.

TOOL SHOP FOR FARMERS.

Every farmer ought to possess a variety of tools, such as needed in repairing farming implements—fences, gates, and pens; and for doing such work generally as will always be required on the premises, and which every person may acquire the habit of doing, although he has no mechanical trade. How often does a nail give way, and hence a board become loose! If he has nails and a hammer at hand, a few minutes will be sufficient to make it secure. Whereas, if permitted to remain insecure, it may fall and be broken, so that a new one will be required to supply its place. How often will the fastenings on a gate or door demand a brief attention, to prevent destruction from the wind, as well as to keep the stock from going where they ought not! How often does a rake tooth or an axe handle get broken; a hoe handle become loose in its socket; an oxbow pin gets lost; a floor plank in the stalls become damaged! If he has tools and materials at hand for making repairs, he may do it himself, in half the time to be occupied in going after a mechanic to do it; besides, if he does it himself, he does not have to pay another person for doing it.

To do these things, he must have hammers and hatchets, gimlets and augers, chisels and gouges, drills and screw drivers, saws and files, squares and compasses, pliers and pinchers; also, a punch, a vice, an adze, a drawing knife, a gauge, and perhaps twenty other articles, the cost of which is not much, not equal to what they will enable a person to save in a single year, if he uses them as he may do. Besides, the time generally taken in such acts would never be missed; it is fragments of leisure about the season of meals, or stormy days, when nothing else would be done. With such habits of attention to the farming implements, and to the various fixtures on the premises, whenever a job of work is to be undertaken, no delay is caused by the want of instruments with which to effect it. This is the secret why some farmers get along with their labor so much better than their neighbors. They do not have to wait a day before begin-

ning any specified operation, in going after a carpenter, a wheelwright, nor a blacksmith, after the laborers are personally ready to engage in it.—*Blake's Farmers' Every-Day Book.*

LIABILITY OF NEWSPAPER SUBSCRIBERS.

The liability of subscribers to newspapers and periodicals is not, in many cases, duly considered. A case has recently been decided, which will awaken attention to the subject. Mr. Jasper Harding, of Philadelphia, not long since recovered a large sum—about \$120 we believe,—for a subscription to the *Pennsylvania Inquirer*, of a man residing in Rhode Island. The circumstances were these: the subscriber took the paper for some time, and then sent to the publisher a note of discontinuance, without forwarding the money for payment. The publisher took no notice of this, nor of several subsequent notices of refusal to take the papers from the post-office. The result was, that notwithstanding the *Rhode Islander* did not receive the papers for several years, yet he was forced to pay Mr. Harding the whole amount up to the period claimed by the bill.—*Farmer and Mechanic.*

From the Ploughman.

SAVE YOUR SLOPS.

Mr. Editor,—Many people are in the habit of letting their slops from the dish-kettle and those from washing days run off and waste, never thinking to save the strong substance contained in the water as an article of manure. It is a usual practice to have a spout from the sink to convey the dish water to the back of the house into some spot to get it out of the way. It is a very easy matter to get a great profit from this wash, as it will make the most valuable manure. I must tell my experience to have one-half believe my story, and perhaps I might need a witness to make it go off. But for some years past I have had a large "slop hole," one perhaps containing ten cart loads of loam, into which is conveyed all the wash from the house. In the summer season the scent arising from this hole is not very agreeable but is easily made to subside by throwing a little fresh loam upon the surface. There

is scarcely a farmer who has not the privilege of saving all his wash from the house which will net him a benefit above the great portion of manure obtained at a much greater expense.

My manner of making this manure is simply this—I draw into the hole where my slops are conveyed at a time about five cart loads of loam; this after planting and in the Fall I take out, put in the hog yard and fill the hole anew—from which as I have tried, I get the best corn and find it the most profitable of any manure which I have had the choice of “scraping” an acquaintance with. What do you say, Mr. Editor, about such manure as this? I like your paper very much.

Yours respectfully,
W. H. P.

Brattleboro', Vt.

CULTIVATION OF THE PARSNIP.

The cultivation of this root is, perhaps, more neglected in this country than in any other, where its valuable qualities are known. The parsnip requires a deep, rich loamy soil, is very easily cultivated, and will produce an abundant crop. Very few are aware of the value of the parsnip as green food for cattle, especially the dairy in Winter. In the Island of Guernsey and Jersey the parsnip is well known and properly appreciated. Col. LeCouteur observes, the crop in Jersey, where they sow their seeds of all kinds in the Spring, varies from 13 to 27 tons per acre, the latter quantity being sufficient for the keeping of 12 Jersey cows for six months! There, “they have been found to yield a heavier crop than the Altringham carrot, in the ratio of 800 and 40 to 260, sixty one.” As the parsnip contains six per cent. more mucilage than the carrot, the Colonel conceives that the difference is sufficient to account for the superior fattening as well as butyraceous quality of the parsnip. The result of the experiment there has shown that not only in neat cattle, but in the fattening of hogs and poultry, the animals become fat much sooner, and are more healthy, than when fed on any root and vegetable, and that, besides, the meat is more sweet and delicious.”

Our farmers who have but small farms, and most of their land cultivatable, may, with a little trouble in collecting and saving all the manure on their premises, by growing roots and carefully cutting all

their coarse fodder and straw to feed with them, produce results at which they themselves would be astounded; many farms might increase their stock more than four fold by such a process.—*Farmer and Mechanic.*

“THE SOIL OF THE SOUTH.”

This is the title of a Monthly Journal, devoted to Agriculture, Horticulture, Domestic and Rural Economy, the resources, the labor, and the capital of the South, published in Columbus, Georgia, under the auspices of “The Muscogee and Russell Agricultural Society.” Its Editorial Department is under the control of Charles A. Peabody, Esq. and Col. James M. Chambers.

This is a new paper, (the number before us being the fourth,) and we most cordially welcome it into the ranks of the Agricultural Journals. We speak, not through mere courtesy, but we verily believe that it is destined to be a most valuable aid to the Farming Interest. The efforts of the very able editors, apart from the contributions of the most intelligent and successful planters in the South, will deserve, and we sincerely hope, will ensure success. We are glad to hear of new Agricultural Journals springing up through the country. There is a plenty of room for all that are, or may reasonably be expected to be in existence for a long time to come.

Each number will contain eighteen pages of quarto size, printed with new type on superior white paper, and furnished to subscribers at the rate of One Dollar per annum, payable in advance. The terms are very moderate; the number before us is worth the money. Again we say, welcome brothers Peabody and Chambers.

From the Albany Cultivator.

NUTRITIVE PROPERTIES OF THE APPLE.

That apples are valuable as food for animals, is now generally acknowledged, and their use for this purpose has, within a few years, been generally extended, though it is probable that their relative value compared with other articles is but little understood. Few exact or reliable experiments

have been made in feeding apples to animals, and we are not aware that much light has been thrown upon the subject by chemical investigation, till the late analyses of Dr. J. H. Salisbury.

The late Payne Wingate, of Hallowell, Maine, made some experiments in feeding pigs with apples compared with potatoes. Both the apples and potatoes were boiled or rather stewed separately, and about four quarts of oat and pea meal mixed with each bushel at the time the cooking was finished—the meal being intimately incorporated with the potatoes and apples while they were hot, and the mass left to ferment slightly, before it was fed to the pigs.

Two pigs of the same litter, and as near as practicable of the same weight, were taken; one was fed for a week on a given quantity of the cooked potatoes per day, and the other on the same quantity of apples. At the end of each week the pigs were weighed, and the food was reversed—the pig to which potatoes had been given was fed with apples, and the one which had received apples was fed for the next week on potatoes. This course was continued through several weeks—the food of each pig being changed every week. The result was that the apples proved to be fully equal, or somewhat superior to the potatoes. In this instance, the apples were mostly sweet, and they, as well as the potatoes, were nearly in a ripe state.

On another occasion, Mr. W. experimented with sweet compared with sour apples, in various ways. He found that when they were fed raw to swine the sweet apples were preferable—the animals ate them better, as the sour apples seemed to make their teeth sore; but when both were cooked and mixed with meal in the way above described, there was no difference in the grain produced by an equal quantity of each. It should be stated, however, that all the apples used were of palatable kinds, nearly ripe; and that unripe and ill-flavored apples are known to be less relished by stock as well as less nutritive. It is probable, also, that when sour apples are eaten raw and in considerable quantities, the animal may take into the stomach too large an amount of acid, which may tend to derange the digestive organs. This objection would be chiefly obviated by cooking, and the saccharine fermentation, by which the pulp loses much of its acid and becomes nearly sweet. It does not appear from analysis that the amount of actual nourishment is much greater in sweet than in sour apples.

(See comparison of the analyses of the Roxbury Russet and Tolman Sweeting.)

Mr. Wingate practised fattening swine for several years on food composed principally of apples. The animals attained good weights, and the pork was solid, and of excellent quality. In other instances, we have known apples fed to horses, cows and other stock, through the winter, with much advantage. For using in this way, sweet apples would probably be best, and they should be such as will keep till spring. They may be stored in a cellar under the barn, or in the bottom of the hay mow—a proper place having been left for that purpose, when the hay was put in. They will be more likely to be injured by heating than by freezing. They will seldom freeze in such a situation as is mentioned; and, if they should be touched by frost, their nutritive properties will not be much lessened if they remain in a dark place and where they will thaw slowly.

A peck of apples a day fed to a cow has been found to add more than a quart to the daily quantity of milk, besides greatly increasing its richness as well as improving the condition of the cow. The effect of apples is equally favorable to other stock. Horses fatten on them, and their coats assume a brilliancy which hardly any other food will give them. For all stock they answer a similar purpose as vegetables in preventing costiveness, which is likely to ensue from the exclusive use of dry food; and in this way and by the nutriment they contain they contribute much to the animal's thrift.

An impression prevails that apples will dry up the milk of a cow. This idea has been imbibed either from the effect produced on a cow by eating a very large quantity of apples at once, by which surfeit and fever were brought, or from the trial not being properly conducted till the animal had become habituated to the food. The ill effects attributed to apples would have occurred with any other rich food, as any kind of grain, potatoes, or other vegetables.

A fair average product of an acre of orcharding, in good bearing condition, may be estimated at two hundred to three hundred bushels a year, and at this rate we doubt whether so great an amount of animal nourishment can be obtained from the same extent of land in proportion to the expense by any other crop. We should not hesitate, therefore, to recommend the cultivation of the apple as food for stock.

It will be interesting to compare the result obtained by Mr. Wingate in feeding swine with apples, with the results of the analyses made by Dr. Salisbury, and in doing this we shall find a more general correspondence than would, perhaps, have been anticipated. The fat producing properties of the apple, according to the analyses, do not essentially differ from those of the potato, though the apple has the advantage of containing a greater proportion of nitrogenous matter.

Dr. S. gives the inorganic and organic analyses of six different kinds of apples, viz: Tolmon Sweeting, Swaar, Roxbury Russet, R. I. Greening, Kilham Hill. We extract the table showing the mean of those analyses, as follows:

Inorganic or ash analysis.

	With carbon- ic acid.	Without car- bonic acid.
Carbonic acid	15.210	
Silica	1.362	1.637
Phosphate of iron	1.336	1.593
Phosphoric acid	11.252	13.267
Lime	3.442	4.199
Magnesia	1.400	1.669
Potash	31.810	37.610
Soda	20.810	24.799
Chlorine	1.822	2.169
Sulphuric acid	6.062	7.229
Organic matter thrown down by nitrate of sil- ver	4.890	5.828
	<u>99.396</u>	<u>100.000</u>

Proximate or organic analysis of the same varieties.

	1,000 parts of fresh apple.	1,000 parts of dry apples.
Cellular fibre	32.03	190.897
Glutinous matter with a little fat and wax	1.94	11.463
Dextrine	31.44	186.805
Sugar and extract	83.25	497.627
Malic acid	3.17	19.585
Albumen	13.79	83.720
Casein	1.64	9.921
Dry matter	167.26	1,000.000
Water	826.64	
Loss	6.10	
	<u>1,000.000</u>	

Dr. S. observes that the analyses were calculated both with and without the carbonic acid. It was necessary that they should be calculated without it, in order to show the real composition of the organic matter of the fruit. "The carbonic acid is formed during the combustion of the or-

ganic matter, and hence cannot be regarded as a constituent part of the apple, except in very minute quantity."

An interesting comparison of the properties of a sweet and sour apple is given in the following tables, showing the results of the organic analyses of the Tolmon Sweeting and Roxbury Russet:

Tolmon Sweeting.

	1,000 parts of fresh apples.	1,000 parts of dry apples.
Cellular fibre	33.90	190.620
Glutinous matter with a little fat and wax	3.52	19.793
Dextrine	28.86	162.890
Sugar and extract	99.05	557.178
Malic acid	2.50	14.061
Albumen	8.97	50.452
Casein	0.89	5.006
Dry matter	177.79	1,000.000
Water	815.20	
Loss	7.01	
	<u>1,000.00</u>	<u>1,000.00</u>

Roxbury Russet.

	1,000 parts of fresh apples.	1000 parts of dry apples.
Cellular fibre	31.20	173.623
Glutinous matter with a little fat and wax	1.70	9.460
Dextrine	36.22	201.558
Sugar and extract	90.27	502.337
Malic acid	3.23	17.975
Albumen	15.03	83.639
Casein	2.05	11.408
Dry matter	179.70	1,000.000
Water	813.45	
Loss	6.85	
	<u>1,000.000</u>	<u>1,000.000</u>

These analyses were made in the months of March and April, and, excepting the Tolmon Sweeting, which was rather shrivelled, the varieties were in good eating condition. Dr. S. observes that, besides the substances above mentioned, the apple contains a small quantity of tannic and gallic acids; the proportion being greater in the russets than in any other varieties examined, and that to those acids is owing the astringency so striking in some kinds, and which is easily detected by the black color given to a knife or any other iron substance when thrust them. In conclusion, he offers the following useful observations:

The ripe apple is rich in sugar, and a body analogous to gum, called *dextrine*, which has the same composition as starch,

but differs from it in being soluble in cold water, and not colored blue with iodine. It derives its name from the action of its solution on polarized light, it causing the plane of polarization to deviate to the right. Hence its name—*dextrine*.

Dextrine and gum should not be confounded with each other. They differ very materially in many respects. The former possesses the property of being converted into grape sugar by sulphuric acid and by diastase, while the latter does not. Dextrine belongs to the class of bodies which are susceptible of nourishing the animal body. All the starch taken as food is converted into dextrine before it is assimilated by the system. The acids of the stomach possess the property of converting starch into the body.

In the fresh apple, 100 lbs. contain about 3.2 lbs. of fibre; 0.2 of a lb. of gluten, fat, and wax; 3.1 lbs. of dextrine; 8.3 lbs. of sugar and extract; 0.3 of a pound of malic acid; 1.4 lbs. of albumen; 0.16 of a lb. of casein, and 82.66 lbs. of water.

In the dry apple, 100 lbs. contain about 19 lbs. of fibre; 1.1 lbs. of gluten, fat, and wax; 18.7 lbs. of dextrine; 49.8 lbs. of sugar and extract; 2 lbs. of malic acid; 8.4 lbs. of albumen, and 1 pound of casein.

In the fresh potato, 100 lbs. contain about 9.7 lbs. of starch; 5.8 lbs. of fibre; 0.2 of a lb. of gluten; 0.03 of a lb. of fatty matter; $\frac{1}{4}$ of a lb. of albumen; 0.45 of a lb. of casein; 1.27 lbs. of dextrine; 2.64 lbs. of sugar and extract, and 09.7 lbs. of water. In the dry potato, 100 lbs. contain about 48.5 lbs. of starch; 29 lbs. of fibre; 1 lb. of gluten; 0.4 of a lb. of fatty matter; 1.25 lbs. of albumen; 2.25 lbs. of casein; 6.32 lbs. of dextrine; and 13.2 lbs. of sugar and extract.

By comparing the composition of the apple with that of the potato, it will be noticed, first, that the former contains, according to the above analyses, about three per cent. more of water than the latter. Second, that dextrine and sugar in the apple take the place of starch, dextrine, and sugar in the potato. Of the former, 100 lbs. of good fruit contain of dextrine, sugar, and extract 11.4 lbs.; the latter has, in the same amount of fresh tubers, 13.61 lbs. of starch; dextrine, sugar, and extract 68.5 lbs.; in the same quantity of dry potato, there is of starch, dextrine, sugar, and extract 68.02 lbs. The above proximate principles are the main bodies in the apple and potato which go to form fat. In the aggregate amount then of fat producing products it will be seen that the apple and

potato do not materially differ. It would be natural, however, to infer that 50 lbs. of dextrine and sugar would, if taken into the system, be more likely to make a greater quantity of fat in a given time, or at least to make the same amount in a shorter period, than an equal weight of starch, for this reason, that the two former bodies, although nearly the same in composition with the latter, yet are physically further advanced in organization, and hence probably approximate nearer the constitution of fat. If this view be taken, then the apple, if of good quality, may be regarded equally if not more rich in fat producing products than the potato. Thirdly, that the apple is richer in nitrogen compounds than the potato; 100 lbs. of fresh apple contain of albumen 1.38 lbs.; the same amount of fresh potato has $\frac{1}{4}$ of a lb.; 100 lbs. of dry apple contain 8.37 lbs. of albumen, and an equal weight of dry tubers has $1\frac{1}{4}$ lbs.; 100 lbs. of fresh fruit contain of casein 0.16 of a lb.; and an equal weight of fresh tubers 0.45 of a lb.; 100 lbs. of dry apples have 1 lb. of casein, and the same amount of dry potatoes contains $2\frac{1}{4}$ lbs. Hence it will be observed that 100 lbs. of fresh apple contain of albumen and casein 1.54 lbs.; and the same quantity of fresh potato 0.7 of a lb.; 100 lbs. of dry fruit have of albumen and casein 9.37 lbs. and an equal amount of dry tubers 3.50 lbs.

From the above it will readily be seen that in albumen the apple is richer than the potato, while in casein the reverse is the case. The aggregate amount of albumen, casein, and gluten in good varieties of the apple is more than double that of the same bodies in the potato; hence the former may be regarded richer than the latter in those bodies which strictly go to nourish the system, or in other words, to form muscle, brain, nerve, and in short, assist in building up and sustaining the organic part of all the tissues of the animal body.

ASHES ON MEADOW LAND.

A premium was awarded by the New York State Agricultural Society, in 1849, to Peter Grispell, Jr., for the best acre of hay. Although there was no competition, this premium was awarded, he having grown 8,335 lbs. of hay on an acre. This meadow was an old one, having been in grass for more than 12 years, but was

ashed over in the fall of 1846, with 100 bushels of leached ashes to the acre.

One fact like the above, is worth a dozen theories.—*Farmer and Mechanic.*

From Moore's Rural New Yorker.

UNBURNT BRICK FOR BUILDING.

From very early date of history, we have matter relating to the dwellings of man being constructed of *adobes*, or mud brick; and at the present day, throughout the world, with some exceptions, the houses of the common people are built of this material, and they have been tried in this country to a small extent with the most satisfactory results in every case.

I can recommend this mode of building with perfect confidence, having constructed one myself and lived in it for years, and actually found more good qualities combined than it is possible to find with any other kind. It proved to be warm in winter and cool in summer; the walls are never damp—it afforded no harbor for vermin—it required no lathing, the walls being ready to receive the plastering both on the inside and outside. The base boards and window casings were nailed to the brick; the nails held as well as if driven into pine timber.

The process of mixing the clay and moulding the brick is a very simple affair, requiring but little ingenuity, and can be performed by any common laborer, who, by a short practice, will make them with great facility, two hundred being considered a good day's work for two hands in preparing the clay and moulding off the brick. The clay is prepared as follows: a circular pit about twelve feet in diameter should be dug two feet in depth, a floor of rough boards placed over the bottom. This is then to be filled with clay, and a small admixture of loam or sand, and water is then to be added sufficient to moisten the batch. A yoke of oxen are then driven into the pit, and turned about to the right until the clay becomes free from lumps, then six bundles of wheat or rye straw should be cut in lengths of about six inches. This is then to be scattered over the batch of mud, keeping the oxen moving at the same time until the two are thoroughly incorporated. A table is then placed by the side of the pit, and, while one man shovels out the mud from the pit, another fills the moulds. To make the bricks square, it is necessary

to fill the corners first and dash in the mud; this makes the bricks solid. When the moulds are filled, they are placed upon a wheelbarrow and taken to ground previously levelled and sanded, where the moulds are carefully inverted and lifted from the brick, which should then be covered with a sprinkling of sand to prevent its drying on the upper side too fast and also prevent its cracking.

The moulds are nailed together like a box, and are of the following dimensions: on the inside fifteen inches long, one foot wide, and six inches deep, with cleats on each end to lift them by. There should also be an aperture left in each end of the moulds to admit air, as the bricks adhere without such precaution; this can be done by leaving the bottom too short to cover the whole length. The moulds need to be kept sanded on the inside and also need washing as often as every third brick is moulded on account of the soft clay adhering to the sides and bottom—a barrel filled with water should be placed at hand for this purpose. When the bricks become somewhat hard they should be raised from the recumbent position and placed on the edge, both sides are then exposed to the air, which facilitates the drying. And, when they are nearly cured, they should be stacked in a large pile and covered with boards to protect them from the weather, that the drying process may be completed before being laid in the walls of the buildings, as the shrinkage is considerable from the time that they are made until perfectly dried. In laying them in the walls, the same kind of mortar can be used that the brick is made from, omitting the cut straw.

As to the durability of these houses there can be no question, if properly constructed. The following precautions should be used: elevate them well from the ground (upon a stone foundation) so that no moisture reaches the brick by capillary attraction. No base should project to impede the running off of the water, and the mortar for plastering the outside of the building should be composed of the best materials for such purpose. Good, coarse, sharp sand, not too much lime, and if at any time it should cleave off it can be permanently attached, by driving in a few good sized nails with large flat heads, and then plastering over the nails, each of which will hold six inches square of the plastering.

They are capable of being finished so as to appear as well as if built of any other common material and at one half the cost

of brick, stone, or wood, and every laboring man can build his own house if he thinks proper, or if he hires a mason to lay up the walls he will be surprised at the advancement which a day's labor will accomplish from the large size of the bricks.—Should I ever build another house for my own use it would be of this material. In constructing our dwellings, we should have an eye to the comfort of the concern more than the display, for it is not the costliness of our homes that secures the former, but in the conveniences pertaining. There are many things required about the home of a man and his family to make it agreeable besides the outward display of the dwelling, and if we can secure comfort at a cheap rate it is time to lay prejudice one side and use the common sense in matters pertaining thereunto.

I. H.

Big Stream Point, Jan. 30, 1851.

The above article is worthy the attention of such of our readers who may have buildings for themselves, or negroes, to erect. The experiment of building with unburnt bricks has been successfully tried. Several such houses were erected in Washington, by H. S. Ellsworth, Esq. while Commissioner of Patents. This gentleman has continued, as we hear, to erect such for his tenants in Indiana. He speaks well of them, and acts as if he believed in them. His authority may be relied on. Philip St. George Cocke, of Powhatan, has several, if not all, his negro quarters built on this plan. We should like to hear from him on the subject, and especially as to their cheapness compared with log-cabins. If any of our friends have tried them, we should be glad to give our readers the benefit of their experience.

From the Farmer and Planter.

SOWING CORN FOR FODDER.

So conclusive and satisfactory have been the experiments in sowing corn for fodder in preference to stripping the leaves from the stalk, in the usual way, that the policy ought not now to be regarded mooted, but one of the fixed facts of agriculture. A year ago we published an account of an experiment made by ourselves, by which it appeared that the corn of the stalks robbed of the leaves at the usual time of ga-

thering fodder was deficient in weight, when compared with that not stripped, the full amount of the fodder. This deficiency was certainly the effect of taking away the leaf from the plant, and so long as a pound of corn is worth more than a pound of fodder, it must be a losing business to remove the blade. We have made several experiments of a like character, with great care, for the purpose of testing the facts, not with the view of cheating ourselves, and all with the same results. If there were no sources from which we could supply our wants in fodder, this loss would have to be submitted to, but there are, and it is questionable whether they had not better be resorted to even if the stripping practice did not injure the corn. Pulling fodder is one of the most unprofitable and irksome operations upon the farm, and to avoid it our practice is, to set apart a piece of land in the spring to be sown at a convenient time—either in May, June or July. Having ploughed thoroughly, we open furrows at from three to three and a half feet apart, in which we drill from two to three bushels to the acre and cover with a plough. After which the cultivator is run through it once or twice, at suitable intervals, according to the season and its rapid or retarded growth. When the corn is in full tassel, we cut it and shock it around stakes, driven into the ground, to prevent its being blown down. We set the butt ends of the corn down and secure the tops to the stake by a band. Some place the tops down, believing that it cures better in this position. We sometimes take the shocks down after they have stood a few days and turn them inside out, and consider the time well spent, as it ensures a uniform and thorough curing of the fodder in a much shorter time than if left standing as first put up. It may, however, be removed before fully cured, to the barn, shuck-house or open sheds, and set up (not laid down) as it can be pressed together, and left till sufficiently cured to pack away for winter use. In this way we have made a very large amount of fodder to the acre; by others as high as a hundred tons, in its green state, have been reported, and there is no reason to discredit the report. If desirable two crops may very easily be made a year. The first may be cut the last of June, and the second in September, or if delayed later, it will have small ears upon it. It is of so rapid and prolific growth, of course it is a great exhauster to the land, and for this reason it is believed of doubt-

ful policy to make two crops. Some have regarded it a good fallow to precede wheat, and have declared great confidence in it for this purpose, but we confess we have not faith to this extent. Others have been pleased with the practice of sowing it on land after oats have been taken off, and think it a benefit to the land, but whatever may be the truth in these respects, one thing is certain and all naturalists and experimentalists agree in it, that the leaves should not be stripped from the plant before the maturity of the fruit. The best course we conceive to be, to set apart at this season one, two, four or eight acres, according to our wants, for the express purpose of producing fodder. If the land has been well manured, it may be sown in peas at the last working, and before frost a valuable crop of pea-vines may be made from the same ground. If it has *not* been manured, sow the peas and give the vines to the land in place of what has been taken from it—then if you choose sow in wheat.

THE CULTURE OF PARSNIPS.

A correspondent of the *American Farmer*, who seems to be acquainted with the subject, writes thus:

“A good crop of parsnips in Guernsey is considered about twenty-two tons per English acre. This is a less heavy crop than the turnip, but is much more considerable than that of either the carrot or potato; and if it be considered that the quantity of saccharine, mucilaginous, and, generally speaking, of nutritious matter in the parsnip, bears a far greater proportion to the water than it does in the turnip, its superiority in point of produce will appear in this case, also, to be greater. The quantity allowed for fattening an ox is one hundred and twenty pounds per day, exclusive of hay. It is found to fatten quicker than any other vegetable. Hogs prefer this root to all others, and it makes excellent pork, though the process of boiling renders the bacon flabby. The animal can be fattened in six weeks on this food. Too much can hardly be said of the beef and pork fattened on parsnips. In July, 1834, a porker was exhibited in the Guernsey market, of twenty-two months, weighing, neat, seven hundred and thirty-three pounds English, which had never taken anything but raw parsnips and sour milk, and finer meat was not often seen. In the

use of parsnips, one caution is absolutely necessary: they are never to be washed, but to be given as they are taken out of the ground. Used in this manner, they are found not to surfeit the hogs and cattle, and to fatten them better and quicker than they otherwise would; if washed, they are apt to satiate, and will, as the farmers say, never thoroughly fatten.—Upon the whole, the weight of the crops are undisputed—the superior quality of the cows; the excellency of their milk; butter, meat and vegetables equally so. Ten thousand acres in Guernsey keep twelve thousand five hundred milch cows; which produce, one with the other, each five pounds of butter per week; this, at twenty-four cents per pound, or its value in milk, amounts to £32,500—of which, three-fourths are sold in the towns; five hundred and fifty cows are exported, and that number of fat cows or oxen slaughtered, and about five thousand porkers are either exported or sold to the towns. The quantity of vegetables, fruit, poultry and eggs brought to market is prodigious, and one hundred thousand bushels of potatoes may be estimated to be exported or distilled annually. The cider of the island is of the best quality, and from five hundred to one thousand hogsheads are annually exported.

“In small farms alone, and among the wives and daughters of the occupiers, are to be found that superior care and economy required for the successful rearing and feeding of calves, pigs and poultry, and the good management of the dairy. The rotation of crops generally observed, gives two crops of wheat in five years. The usual course is that of parsnips, wheat, barley, clover and wheat, the greater product of wheat being after parsnips. The usual produce of wheat in England is estimated at twenty-four bushels; in Guernsey at thirty-three bushels to the acre. In the former, in some cases, forty bushels to the acre have been produced; and in the latter, in a field of two and a half acres English, one hundred and thirty-four and a half Winchester bushels, or fifty-four bushels to the acre.”

Such is the accumulation of Agricultural Produce in the depots of the Central Railroad, that it is almost impossible to find cars enough to carry it to market. What would it be if our Road could reach the Ohio?—*Charlottesville Republican*.

TO EDITORS RECEIVING THE "FARMER'S GUIDE."

Gentlemen,—Having now obtained the concluding sheets of the "FARMER'S GUIDE," we shall proceed to issue the numbers so as to complete the work before the 1st of July. We find there are about two hundred pages more than the work was first intended to occupy; but in order that the price shall not exceed \$5, we have concluded to increase the size of the remaining numbers to 96 pages, instead of 64, so as to bring the work within the original proposition of 22 numbers, the price remaining the same. When thus completed, it will contain over 1600 pages. Will you have the goodness to mention this arrangement in your future notices? It is rather a rare merit in a publisher to exceed the promises contained in his prospectus. We wish, therefore, when such a thing is done, that our subscribers, and the public may appreciate it.

The postage on books published in numbers will, under the new law, be considerably increased, which makes it important that orders by mail should be *immediately forwarded*. We shall feel greatly obliged by your mentioning this fact in your notice of the present number.

Allow us to direct your attention to the preface of Mr. Stephens, contained in this number: it will be found highly interesting.

Very respectfully, yours,
L. SCOTT & Co.

It is something so rare to see or hear of publishers who *come up* to the professions contained in their prospectus, that it is indeed refreshing to have it in our power to acknowledge an instance in which the performance has *gone beyond* the promise. The publishers, in this matter, have done themselves credit, and we most cheerfully give publicity to their conduct for its due appreciation by their subscribers and the public.

It may not be improper for us to say something as to the merits of the above work. We have read it, as far as republished in this country, with great pleasure and, we think, with great profit—and, accordingly, we do not hesitate to recommend it to all who are in any wise interested in the tillage of the soil. The author, Prof. Stephens, shows that he is intimately acquainted with every detail connected with all the various branches of husbandry, and possesses in a very eminent degree a peculiarly happy faculty of communicating his knowledge to his readers.

"We venture," says a writer in the May number of 'Blackwood,' "deliberately to affirm, that in no country or language was so

perfect a work on agriculture ever given to the world before; and that no work on this subject, whether foreign or domestic, can for a moment come in competition with "*The Book of the Farm*." [This is the title under which the work was published in Europe.]

"It would be utterly vain to attempt, by quotation, to give our readers any idea of the extent and variety of the contents of this work; but we may say that we would feel infinitely surprised if an inquirer into any subject touching the culture and drainage of the soil—or relating to the management of stock,—or into any of the collateral arts and sciences, so far as they are connected with agriculture,—or into any duty or employment in which the owner or occupant of the soil may be called upon to engage,—or into any difficulty likely to overtake him in the discharge of that duty, and out of which a more perfect knowledge and skill may extricate him—shall not find in the *Book of the Farm* the information of which he is in quest. In the parts of the work that are strictly theoretical, we conceive that much originality will be found in the author's exposition of the rationale of the feeding of animals, of the germination of seeds, and of the action of special manures. He states the result of every modern experiment worth noting. The present edition contains, in fact, a digest of every experiment, down to the present date, that has been tried in the cultivation of crops, and in the management and feeding of stock—not excepting Mr. Huxtable's method of feeding sheep—and of every new light and discovery worthy of preservation made by agricultural chemists.

"Mr. Stephens' work—or a better, if it can be got—ought, of course, to be in the hands of every factor and land-steward, otherwise they must be unfit for their business; and it ought to have a place in every parish library, that it may be accessible in the winter nights to the agricultural laborers. It is particularly the tenant-farmer's manual, if he is to keep pace with the progress of his art. He may think it costly, but not with reason, if he considers that it comprises an agricultural library in itself. The thrifty and buxom housewives of our homesteads, too, will find admirable instruction in *The Book of the Farm* regarding the important branches of duty that fall to their charge. Mr. Stephens is copious regarding every thing touching the management of the dairy. Indeed, our author seems somewhat *recherche* on the matter of dairy produce. We acquiesce in his approval of the deliciousness of new-made, unwashed butter, churned from sweet cream—a luxury which our southern friends never tasted. "Such butter," says Mr. Stephens, "on cool new-baked oat-cake, overlaid with flower virgin honey, accompanied with a cup of hot strong coffee, mollified with crystallized sugar, and cream such as the

butter is made from, is a breakfast worth par-taking of, but seldom to be obtained.'"

It may be supposed that this work is not adapted to the *Southern agriculturist*. But upon this subject Prof. John P. Norton of Yale College says:

"The staple products of the *South*, it is true, do not constitute a very important feature of the book, but in every other respect it is as valuable to one section of our country as to another. The southern planters are, many of them, men of large capital, employing hundreds of hands. With such means, they have the ability to move more rapidly in the march of improvement than the farmer at the north, whose only wealth lies in his land, and must be extracted thence by the energies of his own arm. On the large southern plantations, we ought to see methodical systems of working, that perfect division of labor which constitutes the advantages of large manufactories over small ones, which Mr. Stephens so constantly recommends and so clearly illustrates. This we find on large English and Scotch farms; each class of laborers has distinct employments, in which they usually continue the whole season or year, thereby acquiring a dexterity and readiness, and an excellence of execution that can only be attained by constant practice. This system is, doubtless, understood at the South to a certain extent, but its perfection can in no way be so readily obtained as by reading such works as the present, as a contribution to the knowledge and experience already possessed by the intelligent planter."

The value of the work is very much enhanced by the notes of Prof. Norton, who is the editor of the American edition now being published. The reputation of this gentleman will be taken as guaranty of an able and faithful performance of his undertaking.

If we might be allowed to make a suggestion to the American Publishers, it would be this, to append to the work a glossary of the terms used by Mr. Stephens peculiar to his own country. Many of our people will be *put up* to understand what he means by some of these, and we hope our hint may be acted on to their and our manifest relief.

Nash & Woodhouse are the agents in this City, and to them we owe our acknowledgements for the last numbers, the 17th and 18th.

It is said that red cedar shavings distributed in rooms where roaches prevail, will cause them to disappear. This simple experiment is worthy of trial.

From the American Agriculturist.

MANAGEMENT OF MANURE OR COM-POST HEAPS.

As the collection of manure is admitted on all hands to be the prime source of agricultural prosperity, I submit the following, on the management of certain matters, with a view to that object:

The first thing to be attended to is, the selection of a suitable spot for a manure heap. This should be on the top of some rising ground, or on a ground, at least, so level that there can be no run of water to and from it, in case of violent rains. A true regard to economy, will also suggest that it should be placed on some field for which benefit it is mainly intended.

Having marked out the ground, say twenty-five feet by fifteen, or any other dimensions suitable to your means, sink stakes three or four inches in diameter, two feet below the surface of the ground, and rising to any convenient height above, at each corner, and at proper distances along the sides and ends. Now, collect from the woods sufficient leaf mould or rich virgin soil to cover the whole space inclosed, one foot deep, laying old rails, or any other material at hand fit for the purpose, along the inside of the stakes, as the mould rises, to confine it within its place. Next, take from the stalls of your animals, (the way of managing which will presently be given,) as much manure as will cover this mould all over equally, to the depth of one foot, except the sides and ends, which should invariably be mould only, for at least six inches from the rails, by which means it will be perceived that the rich and enriching material will be so cased up as to prevent an escape of the gases. Then cover this layer of manure as soon as may be, in order to prevent loss by evaporation, with mould from the woods, to the depth of six inches, and cover the whole with any kind of straw, as wheat, oat, barley, rye, or buckwheat, one foot deep. This will do much to enrich the surface, at the same time that it prevents injury from the sun and wind.—Leaves will do, but straw is much better.[?] Let it stand in this state until your stalls again require cleaning. You will then remove the straw, and spread another layer of manure, except the sides and ends, to the depth of one foot, and over that, a new layer of mould six inches deep, as before, finally replacing the straw as in the first instance. Go on repeating the pro-

cess till you have got the heap to the top of the stakes; then replace the straw and let the whole stand till required for use, commencing a new heap anywhere else most convenient.

As it may be thought the layers of manure would be too thick, I will now give some directions for the management of the horse stable, cattle stalls, hog pens, &c. from which it is to be taken. Before entering upon this, however, I would pause one moment to remind the reader of what he has been again and again told in this valuable journal, namely, that any animal that is worth keeping at all, is, on all accounts, worth keeping well. Probably there is nothing in which the farmer errs so fatally to himself, as in the system of starvation so often pursued, with regard to his poor, suffering brutes. One animal well fed is of more profit in the end, than three half fed; and for the same reason, the manure from one well fed, is worth all the poverty-stricken droppings of three times its number, half starved. Few things are more evident to reason than these; and yet, there are very few things which some men of intelligence are so slow to receive and act upon. It is with us, respecting animals, very much as with regard to acres; every one is crying "more, more;" when, in nine cases out of ten, every individual acquisition is a positive and material loss. It would be difficult to lay down a rule on this subject, of universal applicability. This much, however, may safely be said; if you want good animals, and good rich manure, (which, if properly managed, will always be a fair compensation for the food consumed in making it,) you must not stint your animals; you must feed as nearly *to the full*, in quantity and quality, as you can without waste.

Another rule necessary to success in manufacturing manure is, that every animal on a plantation should be housed at night, the year round; and in winter, by day, except so much time as is necessary for them to get water, and take sufficient exercise. In very cold weather, they should be let out only to get water, and then immediately be put up again. This is the writer's own rule, and he finds it works well in every case, except in regard to hogs, which, for some reason, do not appear to bear confinement in the daytime, in this climate. This practice is rare at the South. If there is another instance of it in North Carolina, he is not aware of

it. The advantages of it, however, are obvious, and, sooner or later, it will be adopted by all.

Into the stalls of these animals, before they are allowed to enter, mould should be thrown to the depth of one foot. As soon as this has become saturated, a mixture of virgin soil, leaves, and old logs, sufficiently decayed to break up finely, together with the scrapings from beneath and around them, should from time to time be added in sufficient quantities to keep all dry and comfortable. A little shelled corn thrown into the stalls and pens, will induce the hogs to root, and mix up the whole together, in the best manner, at no cost. When the accumulation has become too great for convenience, let it be taken out and put upon the pile, as above directed. Before the animals are again put in, throw mould, as at first, or any material fitted to absorb and retain the urine and juices, to the depth of one foot. From this, it will be seen that no manure goes into the pile in a state tending to waste. When required for use, the pile is cut down perpendicularly, and as evenly as possible, in order to pulverize it well, and make the whole mixture equal.

The writer has now pursued this plan to a greater or less extent for several years. Its advantages are, that it saves the expense of all tedious preparations to prevent the escape of fertilizing matter. It is adapted to every man's capacity, and every man's means. Nothing is ever seen escaping from one of these piles—no ammonia on a damp or frosty morning ascending like smoke from a furnace—a case so common where the contents of stables are thrown out without any admixture to absorb it. The rain never falls in more than sufficient quantities to afford the necessary moisture, while the straw always to be kept on top, is an effectual protection from sun and wind. Its tendency to promote the health and thriftiness of the animals must be obvious. Their stalls are always sweet and comfortable. Of course, this plan also saves the expense of building manure houses. Its superiority to the mode of managing these matters commonly recommended—that is, hollowing out the barn yard into the form of a ditch, and throwing the manure into it, to be washed away and wasted by rain, wind and sun—will readily appear. Animals should not be permitted to run in a barn yard except in going to and from their places of confinement; and to prevent any

loss from this, it should be kept constantly covered with mould, leaves, straw, &c. which, once or twice a year, may be scraped up to be put on the heap between the layers of manure.

There are numerous other sources from which materials may be drawn to augment and enrich these heaps, such as weeds, the scrapings of garden walks, the contents of privies, fowl and pigeon houses, rotten chips, sawdust—a capital thing to throw into pigsties and cow stables—old rags, hogs' hair, coal ashes, soap suds, dish water, urine from the chambers, which may be poured upon them daily, and last, though not least, corn cobs. These are sadly wasted at the South. Give a really good manager ten acres of land, and the corn cobs that are burned, or thrown away upon some of our large Southern plantations, and I verily believe, though as poor as poverty at the outset, he would in a few years become a very comfortable liver. By this plan, these will of course be preserved. Where corn is fed to hogs and horses in the ear, the cobs will be mixed up with the materials under foot where they are finally thrown; when shelled for family use, or other purposes, they should be carefully gathered up, and thrown upon the barn yard or into the hog pens.

A person who has not tried this plan, could hardly conceive how large a mass of rich fertilizing matter may thus be collected in the course of a year from a very few animals, and how greatly, if well followed up, it will add to the value of landed property. It is well known that the whole mass, by lying a sufficient time, and at last thoroughly mixed together, will become nearly as valuable as so much raw stable manure. While a place alongside of it of equal, perhaps far greater original value, is going perceptibly and rapidly to ruin, the one on which this, or some better system is pursued, will be quite as rapidly improving in beauty, fertility, and the various means of comfortable living. The garden, which at first produced scarcely anything eatable, begins to send forth daily its stores of the finest vegetables; the fields, which produced only sedge grass, and that with much ado, become loaded with yearly increasing crops of grain; bare, unsightly patches are clothed with rich verdure; the orchard, renewed and invigorated, teems with fruit sweet to the taste, healthful to the body and delightful to the eye; every thing looks cheerful, smiling and happy. The very animals participate in the gen-

eral blessing. Their glossy hides, their sportive motions, their indolence and their ease, testify their comfort, and the enjoyment they find in the abundance they have thus been made instrumental in creating around them.

T. S. W. MOTT.

COAL—A NEW MATERIAL IN CABINET WORK.

The Fife Advertiser says:

"Mr. Williamson is making a sofa wholly composed of coal; it is nine feet long with three compartments or divisions, and is sufficient to contain seven persons on it. The front standards are beautifully carved, displaying three mongrel animals, which forcibly remind the spectator of the richly carved figures that appear so frequently in Dr. Layard's Remains of Ancient Babylon. This rare geological curiosity was ordered by Gen'l Wemyss, and it is highly probable that it will appear at the Great Exhibition, as it is ordered to be finished previous to that time."

We saw a few days ago, on the finger of a distinguished physician of Chesterfield, a very neat ring made of coal from the mines of Mr. Peyton near Kanawha, in this State. If coal should enter at all extensively into the manufacture of cabinet work, we doubt not, from specimens which we have seen, that the coal from the mines of Mr. Peyton, will compare most favorably with any to be found in the Kingdom of Great Britain. We hope that some of our skilful mechanics will try their hands on this "new material in cabinet work," and we will with great pleasure accept the specimen of their skill and proclaim it aloud "to all whom it may concern," or to whom "these presents may come greeting."

"THE STETHOSCOPE."

The May number of "The Stethoscope," as far as we are able to judge, is worthy of the very liberal support which this monthly has received. We are no doctors—though we have had some feed in our family—and therefore do not feel competent to speak of the merits or demerits of the strictly medical portion of the number. There is an article of which we may be presumed to know something, and of which we may be allowed to speak. We refer to Dr. Lord's essay on "The

Nature and Requisites for the Credibility of Testimony," which we recommend to the members of the Bar. We hope that the effort of the editor in establishing a "medical journal" in Virginia, may be, in all respects, successful.

HAYMAKING.

Why is it invariably recommended, when medicinal herbs are to be preserved for use, that they be dried in the shade? For two plain reasons—first, because an intense summer's sun deprives them of a portion of their medicinal virtues; and, secondly, to prevent their quality becoming deteriorated by dew and rain. The same precaution is observed in curing hops, and it is no less important in the curing of hay. The sun abstracts much of the best properties of both. It is for these reasons, that in many of the best farming districts the grass is never spread from the swarth, but after it has partially dried there, it is *cured* in the cock, where it dries evenly, that is, the moisture becomes equalized in the mass, and the stems dry as fast as the leaves, and where neither the sun nor the rain nor the dew is liable to do it material injury. And we contend that there is not only a great improvement in the quality of the hay, by this process of curing, but an increase in quantity, the leaves and finer parts being all preserved, and a manifest saving in labor. The labor of spreading and raking is in a measure saved; the grass being cocked from the swarth with the fork, and after it has cured there, the hay being partially spread for two or three hours to complete the process.—*Cultivator*.

The haymaking season is near at hand, and we can render no greater service to the farmer than to draw his attention to the mode of curing hay as set out above. It is true, that fifteen years ago the above extract was published in "The Cultivator," then under the editorial conduct of Judge Buel, who gave it his approval. In his comments upon this plan he says:

"Hay loses all its nutritious properties—the properties which nourish and fatten the animal—call it oil or sugar, or mucilage, or what you will, by long exposure to the rays of a hot sun. We also dry in small cocks, after the grass is wilted. It then dries all alike, except a portion upon the surface of the cock. The baneful influence of the sun is excluded—an equalization of moisture takes place, and if left to cure here, it never afterwards heats in the mow or stack. Hay exposed several days to the sun loses its color and much of its nutriment."

On another occasion, when speaking on the same subject, he says: "We estimate the gain in this crop, by the new over the old mode, at least one-third."

Many of our best farmers have adopted this mode, and their experience is decidedly in its favor. There are some, however, who will not forsake the old-fashioned system. To these we would say, just give this (to you) new plan a trial, especially with your clover, and let us have the results. It is by a comparison of the experience of practical and intelligent farmers, that we are able to eliminate the true way to success; and however indifferently a man may crop it, yet *his* views will not *always* be without interest and profit.

LOOKING FOR A BETTER COUNTRY.

In our early school day reminiscences, we recollect an energetic, sterling little fellow, who was always conspicuous in the Saturday fishing frolics, ever on the ground in good time, and ready to start with the first. But his patience and anxiety did not allow him to try long, before he was off in search of a better place; soon he was out of sight, toiling and hoping on, all the time expecting to get to the best place, where he would outstrip his companions, and realize his largest hopes. The day's operations closed, our little restless fellow would come up, wearied and muddled, and well scratched, and with *less success* than his associates, who had staid behind. This was the man in embryo; the boy was a true type of the man in after years. The first thing he did, when ready to enter upon the business of life, was to show himself a man of too much shrewdness and energy, to settle down in the old country. Accordingly he moved to a new one, and conceived he had been so remarkably fortunate as to have found the very thing for which he was looking, all just right. His friends behind were sorely ridiculed for their want of enterprise, to be throwing away their time in that old country, "the best plantation in which, he would not have, if he was to be compelled to live on it." A few years after this, however, he learns that the perfections have not all been concentrated yet, but that they are to be found, *a little further on*, and thus he has been running after phantoms, until he is now getting to be old, soured and poor; living on perhaps the worst piece

of land which he has ever owned; but thinks yet, if his wife had been right willing to have seconded all his notions, he should have found that *best place*, some where in the West, or a little the other side. He has never built himself a good house, planted orchards, improved his land or anything else, just because he was not settled. This is a hasty sketch from real life, but does not describe an isolated case; you all probably know some man that it will suit. In its general outlines, it exhibits the true Southern character. We have been very much of a go-ahead people, but our energies have been more taxed in searching for imaginary good than in converting the means already in hand, into blessings. It is a truth hardly conceded, that there is not much difference naturally between countries, all having their advantages and disadvantages. Many men spend their days, in restless anxiety, searching for a complete combination of all, a good never to be realized, and do not learn till too late, that they have been running after a mere chimera of their own brain, all their life long.

We complain not of the energy or enterprise prompting to such efforts, for there has been much in our country to induce them, and thousands we know, have bettered their fortunes by going to a new country. But we would rebuke that spirit which is ever working in us dissatisfaction with means already in hand, blinding our eyes to the good at command, and deluding our hopes, in the anticipation of a perfection, no where on earth to be found.—Countries differ, we will admit, but much less than we usually imagine. And then the chief good, which we seek in a new country, is pecuniary, one purely of dollars and cents, which is often a poor exchange, for the moral and social privileges sacrificed. Is it a small thing to sever old friendships and associations—to cast your lot among strangers, who sympathize not with nor care for you—to leave your churches and your schools, and old home comforts all behind? And even with the best success, there is often more put down for the benefits of a move, than is properly due. The most energetic men have generally been those who have emigrated, and though they may have succeeded, is it not quite probable that the same men would have been successful, if they had kept the old homestead? Compare notes with some of the best of those left behind; and say the best, because that is the only fair compari-

son. How stands the difference? Very often in favor of the old country. But it is said, that after a few years of rough and perplexing inconveniences, the new country has the advantage of the old, in moral and social privileges. This may be, and often is true, but nothing is easier of explanation. We have remarked before, that it has generally been the men of energy and enterprise who have rushed to the occupancy of the new lands; that energy cannot be restrained; it will not only subdue the forest, but it will soon also build churches, school-houses, and all those nurseries and appendages to good society; but this only proves how much might have been accomplished, if all those good men had remained and exerted this same effort in the old country, where society has grown poor, and its institutions have gone down, just because their pillars had been removed and so much of its saving leaven had been extracted. These reflections come too late to cure the past, but they may serve to reconcile us to our present lot, and make us feel that we are not ruined, because we have no more new country upon our border.—“*Soil of the South.*”

CLEANSING THE BARK OF FRUIT TREES.

This operation should be performed in early spring, as well as in mid-summer.—The rough, loose parts of the bark should be scraped off, as well as moss and other parasites. The bark should then be covered with the following mixture, as high as the operator can reach, with an ordinary long handle whitewash brush:

- 5 pounds whale oil soap,
- 1 pound fine salt,
- 1 pound fine sand,
- 2 pounds potash,
- 2 ounces nitrate of soda,

dissolved or mixed with water to the consistency of cream, and thoroughly rubbed upon the bark.

Many kinds of insects are kept from trees by a solution of whale oil soap alone, and many such as are resident in the crevices of the bark, are destroyed by salt. The fine sand is intended, during the rubbing, to scratch the outer coating of the bark, and thus assist the other ingredients for more perfect action. The potash and nitrate of soda will decompose or soften the dead parts of the bark, so that during the summer they will be thrown off by the

healthy action of the growing bark. If the above mixture be applied in dry weather, it will become so hard as to remain during several showers, and thus have time to perform its office. Trees with smooth bark, such as the plum, many of the cherries, &c. should be rubbed with a wet rough woollen cloth in a few hours after applying the mixture; this rubbing will cause the sand to clean the surface so perfectly as to give the bark an improved and more healthy surface. Trees so cleansed are not as likely to be revisited by insects as those left with their natural surfaces, nor are they as likely to become bark-bound. Indeed we have never known a tree to exhibit the disease called bark-bound, the surface of the trunk of which had been softened by a soap-wash in early spring. The cherry, apricot, peach, and nectarine are subject, when left to their natural state, to this disease, and it has usually been attributed to too rich or too moist a soil; and under-draining and slitting the bark lengthwise with the knife are the usual remedies. The one is expensive and often impossible where choice trees are planted, and the other is barbarous and unsightly, causing exhalation of gum and consequent canker. In any case, a few applications of soap to the surface of the part hide-bound will remove the difficulty, and the mixture before recommended may be applied, slightly warmed, when required to soften the bark of a hide-bound tree.—*Professor Mapes.*

From the South Carolina Farmer and Planter.

FARMING.—ATTENTION TO SMALL THINGS THE SECRET OF SUCCESS.

Messrs. Editors,—If you will allow me the use of a brief space in the columns of the Farmer and Planter, I will make a few hints upon matters relating to farming.

I fully believe that too much cannot be said in favor of subsoiling our lands and protecting them against the washing rains, that bear so rudely away from the soil the elements essential to its productiveness. These matters, together with rotation of crops, drainage of wet lands, are receiving, I am glad to see, due consideration at your hands. The ravages occasioned by their neglect throughout the South are too apparent to be mistaken, and all except the voluntarily benighted and those into whose mind no light can shine, are now convinced of what ought to be done to render their

land productive and their homes permanent. But there are other things to be attended to besides these fundamental principles of successful farming. There are many trifles, so considered, that make the profit or loss of the husbandman, and in the observance of these lies the good management of the farmer, or in their neglect the secret of his failure. In the first place, it is a matter of moment for most of us, who cultivate diversified crops, to ask ourselves, if we have our stables, granaries, and out buildings properly located and conveniently constructed. Are the stalls and troughs for our horses so constructed as to be comfortable, and to prevent waste of food? do we use chopped fodder, corn or meal? do we vary the food, or continue the same? do we make thorough use of the curry-comb morning and night? is our stock in good condition in the time of laying by our crop? Have we good collars and traces for our horses, or do we use grape vines and hickory withes? have we good ploughs, harrows, hoes and every kind of implement necessary to facilitate and save labor, and do we suffer these to lie out in night dews and rains, or have we a place for each one beneath a shelter, and do we take care that each is stored in its place when not in use?

Do we feed our milch cows night and morning upon peas, turnips or meal, or do we suffer them to go only with what they can pick up in the range, and then complain that we are without butter and milk, and that our cows, miserable milkers, are dry the greater part of the year?

Have we set apart a piece of land, and manured it well, to be sown in ruta бага turnips? If not, is it not time to do it immediately?

Do we, as a matter of grace, feed our cows on decaying cabbage leaves, and expect to have butter fit to be used?

These are but a few of the many questions that farmers might ask themselves with profit, but I will forbear pressing more upon the mind of the reader lest he fail to heed any of them. It is a very general fault among the best managers that small things are passed by as too insignificant to observe attention.

This is a great mistake, and never shall we be a thrifty, independent, good-living people, until we change our habits in this respect. The trifling occurrences of everyday life make up the sum of human happiness or misery; so do the details of

planting and farming constitute the gain or loss. Vast crops of rice may be made and handsome prices realized—bales of cotton may be heaped on bales, till Ossa be piled upon Pelion, and if the little conveniences and delicacies of every-day life are not at command, we fail to secure the object of all our exertions.

From the American Farmer.

PLOUGHING IN GREEN CROPS.

It must be admitted as an agricultural truth, that soils which may have been long in culture, without having been cultivated in clover, or the grasses, or received periodical dressings of barn-yard or other purescent manures, must necessarily have become deprived of the greater portions of their mould, as every crop which may have been raised upon, and removed therefrom, carried away much of the soluble parts of the animal and vegetable matters which were therein. And as it is, also, an admitted truth, that *mould* is an indispensable ingredient in every productive soil, it stands to reason, that, when in the course of improvident culture, it may have been abstracted, it is essential that it shall be restored, in order that the soil may be reinstated in its former powers of production. The question, then, *how this restoration shall be brought about?* is one full of interest to every agriculturist. Those who have ample resources—who have full supplies of animal and vegetable manures—who have the materials on their land to form composts, comprising the elements in question—need look no farther for the means of restoring the needed constituents to their soil. But those who are differently situated—who make but little manure, and are but ill supplied with the raw material for forming composts, must turn their attention to the next best means of placing such matters in the soil as will form mould. What those *means* are, is the subject of the present paper. We have often advised the growing, and ploughing in, of green crops, and we here repeat that advice; and we do so, from a belief of its efficacy, in the first place, and the necessity of so doing, in the next. We are among those who believe, that no soil can be truly productive, unless both *organic* and *inorganic* food be present therein—we believe, that the *air* can supply a portion of the *organic* food; but we are firmly convinced, that the great body of such food has to be supplied from the earth when the fruit is forming, and that, if it be not there, the plants grown in it will be but poorly fed. We believe, also, that the capacity of the soil to avail itself of the food of the air, depends materially upon the fact of the existence in it of mould—that, in proportion to the quantity of decayed or decaying vegetable and mineral

matters which it may contain, so will be its powers of attraction,—so will be its power to appropriate the fertilizing gases of the air.—To be sure, the rain, the hail, and the snow may bring them down, and by the process of percolation, they will find their way into the earth; but if either happens to fall upon a sandy soil, wherein there may be no mould to *fix* the gases which may have been brought down, those gases will speedily escape, and confer but little benefit on the growing crop, because of the want of power in the soil to retain them. The affinity of clay for such gaseous bodies, would, by the power of retention, inherent in it, chemically, as well as physically, exert a much greater, and more friendly influence, in dispensing such food to the plants growing on it, than would sand, whose affinity is dependent upon the mould it may contain; but even clayey soils need mould nearly as much, ultimately, as do sands, as when the growing crops *come to form their fruits*, the earth is, to a very great extent, the source whence the substances for the formation of such fruits have to be derived.

The next question to be considered, is,—what plants shall be cultivated and ploughed in? This question is to be solved by circumstances. The facility by which seed can be obtained—the facility with which the plants to be selected can be grown on poor land—and the construction of their leaves,—whether they be such as to enable them to derive considerable portions of their food from the atmosphere. This latter consideration is highly important, as all that they derive from that source, will be so much to be added to the fertility of the soil, when the crop comes to be ploughed in.

In England, and other European countries, there are various plants grown for this purpose—the red clover, as with us; but then, this plant, without manure and lime, will not grow and form such a sod as to make it an object with American farmers to turn it in. Indeed, any soil that will grow a good crop of red clover, in our opinion, does not need such extra attention. *Lupine, Rape, Rye, Sainfoin, Spurry, and Buckwheat*, are all grown in Europe for being ploughed in—the turnip is also used for the same purpose. In view of all the circumstances which should operate to determine opinion, as to which are the best plants to be cultivated in *our country*, as crops to be ploughed in as improvers of poor land, after much reflection, we have arrived at the conclusion, that *Buckwheat, Peas, and Beans*, are the only plants about which any serious ideas should be entertained. They all bear many branches, much and luxuriant foliage, and possess a series and formation of leaves, which eminently qualify them to absorb, feed upon, and assimilate in their structures, the fertilizing gases of the air; and hence, when turned under, will not only restore to the earth, all that they may have gained from it, but much more, which they had abstracted from the atmosphere—they will all grow upon compara-

tively poor land,—and when a little assisted, will grow in luxuriance. For these reasons we believe them best adapted to American culture, for the proposed object.

Let us now consider how they may be best managed, at the least expense, so as to produce the greatest benefit. In expressing our opinion in this particular, we do not wish what we may say, to be received as *oracular*, but merely in the light of an *opinion*, which we believe to have been well considered, honestly formed, and maturely reflected upon.

We would plough in two crops in a season, which we would manage thus:

We would plough the ground six inches deep, harrow well; harrow until we had brought the soil to very fine tilth—we would then broadcast on each acre, ten bushels of *lime*, one bushel of *plaster*, ten bushels of *ashes*, unleached the best, and two bushels of *salt*, then sow one bushel of *buckwheat*, harrow the whole in together, and roll.

When the *Buckwheat* first came into bloom, we would roll, and plough it in eight inches deep, then run the roller lengthwise the furrows, and harrow. In five or six days after this, we would sow broadcast over the field, at the rate of fifteen bushels of *lime*, or *ashes*, per acre, sow thereon two bushels of "*Cow*," "*Finney*," "*Black-eye*," or any other *pea*, and roll. When the *peas* came into flower, we would roll them, then plough them in eight inches deep, roll lengthwise the furrow, and harrow.

We would leave the field thus until it was time to seed it in wheat; when we would give it a harrowing, to destroy weeds, and freshen up the soil; then sow four bushels of *bones*, and four bushels of *ashes*, and two bushels of *salt*; then seed it with wheat, at the rate of two bushels to the acre, and harrow the whole in together, and roll.

With this preparation and management, we believe, that even worn-out land may be made to bring a good crop of wheat, and bear being seeded in clover, which we would seed on it the next spring. We do not pretend to say, that it would grow as large a crop as it would had it been manured with a heavy dressing of *guano*, but we do affirm, that the improvement would be more durable, and the soil placed in a condition better adapted to its permanent melioration.

After the clover had stood two years, we would plough it under, and give the land a dressing of fifty bushels of *lime*, or fifty bushels of *ashes*, or one hundred bushels of *marl*, per acre, and calculate, by means of a proper rotation of crops, and periodical manuring, to keep it up to a profitable and advancing state of production.

In regard to the *compost* of *bones*, *ashes* and *salt*, before we sowed it, we would treat the substances thus: We would intimately mix them together, throw them up into a heap, where he would let them remain for a few days, and until fermentation had commenced, which is easily ascertained by inserting a stick

into the mass. In withdrawing the stick, if it felt hot, that fact should be received as evidence that the fermentation had gone far enough. If this point was reached before we were ready to sow, we would shovel the mass over, and add one bushel of plaster for every ten of the compound. With such treatment, we feel certain that a very high state of fertility may be imparted to almost any soil, and we are sure that the expense should not be complained of, when a good crop of wheat, and two luxuriant crops of clover, could be thereby grown in three years, and the land made fertile in the same time.

LET THOSE WHO DOUBT, TRY THE EXPERIMENT.

If it be objected to this system of improvement, that one year will be lost to culture, our answer is ready. To cultivate such lands as we propose to improve, can only result in loss and disappointment, as they do not possess the inherent properties necessary to ensure the growth of a profitable crop; while one acre improved by our process, will yield four times as much as it would have done before, so that, in fact, so far as products are concerned,—so far as quantities are involved,—there will be an actual gain the year succeeding improvement, of more than three-fold, calculating nothing for the year devoted to the renovation of the land. Besides which, the soil will have been so far restored to fertility, as that, by subsequently adopting a judicious rotation of crops, and care in manuring, it may be retained in good heart for any length of time, provided clover, or grass, be adopted as one of the crops in the system of rotation.

This question here presents itself: Is it not better—ininitely better—to omit a crop for one season, with the sure prospect of permanent melioration, than to continue the culture of the field with the certainty of loss? The answer to this question needs not being stated by us, as the good sense of all intelligent agriculturists will prompt them to give an affirmative response.

EXTRACT FROM EDITOR'S CORRESPONDENCE.

"South Quay, May 9th, 1851.

"Mr. Planter,—Whilst I am writing I will take the liberty of inquiring of you and your many contributors, (perhaps Aunt Doritha Dumpling can throw some light on the subject) the cause of, the cure for, or the preventive of, a disease commonly called the club root, which attacks many of the garden vegetables, more particularly the cabbage. The first intimation you have of its presence, is the falling of the heads during the heat of the day, and upon examination you will find several balls, of different size and form, some as large as a small hen egg, attached to the root of the plant, and in a few days entirely destroys it.

Salt, ashes and lime have been tried, but neither seem to have the desired effect. If, Mr. Planter, you can give any information on the subject, you will confer an everlasting favor on us bachelors, and the ladies particularly.

"ONE OF THE YOUNG DUMPLINGS."

We will be glad if Mr. or Mrs. Dumpling will give the above desired information. We would be pleased to hear from them on other subjects also.—*Ed.*

COTSWOLD, OR NEW OXFORDSHIRE SHEEP.

We invite the attention of our readers to the advertisement of Mr. Henry Carroll, of Baltimore county, Maryland, in this number of the Planter. On reference to the list of premiums awarded by the "Maryland State Agricultural Society," we find that his lambs have received premiums at two of the three exhibitions already held. We extract from his letter on the subject, the following: "I have recently been introducing new strains of superior blood into my flock, having personally selected the bucks, and a portion of the ewes from the flocks of Mr. Reybold, of Delaware, whose sheep have almost invariably been successful at the various exhibitions at which they have been entered."

We thank "The Farmer and Planter" for its flattering notice of us in a late number. We are always gratified to be spoken well of by any of our cotemporaries, but we are very proud to have the esteem of the *Farmer and Planter*—for whose entire success we would "sincerely pray."

FOR SALE,

20 BUCK LAMBS of the *Cotswold*, or *New Oxfordshire* Breed, deliverable in Baltimore after 1st of August proximo.

For several years past, great care has been given by the subscriber to the selection of his Breeding Ewes, part of which, and the Rams have been selected from the Celebrated Flock of Clayton B. Reybold, Esq. of Delaware.

Price \$15 to \$20, according to choice.

For further particulars inquire of S. Sands, Editor of the "American Farmer," Baltimore, or

HENRY CARROLL,

Westermans' Mills, P. O. Baltimore Co. Md.
je—3t

TO AGRICULTURISTS.

MORRIS & BROTHER have received the following valuable Books, pertaining to Agriculture:

Elements of Scientific Agriculture, or the connexion between Science and the Art of Practical Farming. This was the prize essay of the New York State Agricultural Society; by J. P. Norton, M. A.

Elements of Agricultural Chemistry and Geology; by Jas. F. W. Johnston.

American Agriculturist, for the Farmer, Planter, Stock Breeder, and Horticulturist; by A. B. Allen; numerous plates. The 8th and 9th volumes of this most valuable work are received, also complete sets. Every farmer should have this work.

American Farm Book, on Soils, Manures, Drainings, Irrigation, Grasses, Grain, Roots, Fruit, Cotton, Tobacco, Sugarcane, Rice, and every staple product of the United States.—This is a perfect farmer's library, with upwards of 100 engravings; by R. L. Allen.

Farmer's Manual, with the most recent discoveries in Agricultural Chemistry; by F. Faulkner.

A Muck Manual for Farmers; by S. L. Dana.

Farmer's Land Measurer, with a set of useful Agricultural Tables; by Jas. Pedder.

American Husbandry.—Series of Essays on Agriculture, with additions; by Gaylord and Tucker.

Farmer's Encyclopædia; by Cuthbert W. Johnson.

Productive Farming, with the most recent discoveries of Liebig, Johnston, Davy, and others.

European Agriculture, from personal observation; by Henry Coleman. This is a very popular work.

Johnson's Chemistry and Geology, with their application.

Johnson's Dictionary of Gardening; by David Landreth.

London's Gardening, for Ladies; by A. J. Downing.

Square's Agricultural Chemistry, Boussingault, Rural Economy, Buist's Kitchen Gardener, Landscape Gardening, and Rural Architecture; by A. J. Downing.

Fessenden's American Gardener.

American Fruit Book, with full instructions; by S. W. Cole.

Downing on Fruit Trees.

Theory of Horticulture; by Lindley.

Florist's Manual; by H. Boume; 80 colored engravings.

Bridgman's Kitchen Gardener.

In addition to which, Morris & Brother have all of the late Works on Agriculture, Horticulture, and Raising Stock, of any celebrity.

Richmond, March 12, 1851.—1y

GREAT SALE OF SUPERIOR

THOROUGHbred SHORT-HORN CATTLE.

THE subscriber having more stock than he can well sustain on his farm, will offer at public auction about 30 head of his improved Short Horn Cattle, consisting of Bulls, Cows, Heifers, and Heifer and Bull Calves, on the 26th day of June next, at his farm two miles and a half from this city.

It is known to breeders of improved stock, in this country and in Canada, that the proprietor of this herd during the last twelve years, has, through the medium of importations from England, and selections from the best herds in this country, spared no expense to rear a herd of cattle, from which superior animals could be safely drawn for improvement and crosses upon other herds. His importations have been derived from that eminent breeder, the late Thomas Bates, Esq. of Kirklevington, Yorkshire, England; which herd, it is well known, has recently been disposed of at public sale, by his administrators, and dispersed in many hands, and can no longer be resorted to as a whole for improvement.

The announcement of that sale created great interest, and all Short-Horn Breeders in England seemed emulous to secure one or more of these animals to mingle with the blood of their own herds; and at the day of sale there was found assembled the largest audience ever before witnessed upon a similar occasion, numbering, as was said, from four to five hundred persons, and among them the best breeders in England, and several from other countries.—Some of the animals bringing prices that seemed incredible to many.

In the herd now offered for sale, will be included the imported Bull Duke of Wellington, and the premium Bull Meteor. These are Bates' Bulls, and their reputation as stock getters are too well known to need any comment. I am, however, authorized by Lewis F. Allen, Esq. of Black Rock, one of the most prominent breeders in this country, and who has had ample means of forming a judgment, to say, "that in no instance, to his knowledge, had these two bulls been bred to Short-Horn Cows of other breeds, previously imported into the United States, but what the produce was superior in general qualities to such herds.

The most of the stock which is now offered for sale, have been bred by these two bulls, and the proprietor having a young Bull more remotely connected with that portion of the herd he retains, (being about 14 in number,) can spare these two valuable Bulls. There will be in the stock offered for sale 6 young Bulls, from eight months to about two years old, in addition to the two named above; and the remainder of the stock will be composed of Cows, (most of them possessed of extraordinary milking qualities,) Heifers and Heifer Calves. It is believed that no herd of Short-Horns has ever been offered for sale in this country, exhibiting more of the valuable com-

binations of qualities which contribute to make up perfect animals.

A Catalogue containing the pedigrees of these animals will be ready for delivery at an early period, in which the terms of the sale will be particularly stated. A credit will be given from 6 to 18 months. Gentlemen are invited to examine the herd at their convenience.

GEORGE VAIL.

Troy, New York, April 1st, 1851, 3t

AGRICULTURAL WAREHOUSE.

THE Subscriber continues to manufacture Agricultural Machines and Implements, such as Horse-powers, Threshers or Drums, Fan Mills, Straw Cutters, Corn Shellers, a variety of patterns, Hill Side and Subsoil Ploughs, Corn and Cob Crushers, Cultivators, Harrows, &c. all of which will be made in the best manner, and after the most approved patterns. My Horse-power has been tested two seasons, and uniformly pronounced to be the best in use. Machines repaired in the best manner. Castings in iron and brass furnished at short notice.

H. BALDWIN,

je—3t

148, Main St. Richmond.

STATE AGRICULTURAL WAREHOUSE,

No. 25, Cliff Street, New York.

THE subscriber has constantly on hand all of the Superior and Premium Implements for the Planter, Farmer, and Gardener, with a large assortment of Field and Garden Seeds, Fertilizers, &c. May be found Prouty and Mears' Premium Centre Draft Ploughs.

Emery & Co.'s Horse Power, which received first premium at the last State Fair, in competition with Allen's, Wheeler's, and others.

Hovey's Straw Cutters, also Sinclair's, Tower's, Stevens', Clinton's, Botts', and Hovey & Co.'s

Corn and Cob Crushers of several patterns. Emery's Seed Drill, Corn Planters.

Geddes' Harrows, Cultivators, Garden Rollers.

Water Rams, Pumps and Chain Pumps. Grain Mills, Bullock's Hay Presses.

Reaping Machines, Smut Machines. Guano, Bone Dust, Plaster of Paris, Bone

Black, Sugar-House Scum, Bone Manure.

Timothy Seed, Red Top, Blue Grass, Ray Grass, &c. &c.

G. H. BARR.

ma—2t

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED STOCK.

STOCK Cattle of all the different breeds, Sheep, Swine, Poultry, &c. will be purchased to order, and carefully shipped to any part of the United States, for which a reasonable commission will be charged. Apply to

AARON CLEMENT, Philadelphia.

Refer to Gen. W. H. Richardson, Richmond, Virginia.

N. B.—All letters, post-paid, will be promptly attended to.

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COMMERCIAL RECORD.

WHOLESALE PRICES CURRENT,

Reported for the Southern Planter by

NANCE & GOOCH, COMMISSION MERCHANTS.

TOBACCO—The market for the past few days has not been very active; our breaks are large, with heavy receipts. Common descriptions are lower; no change in fine descriptions. We quote lugs \$5 25 to \$7; common leaf \$7 25 to \$8 50; middling \$9 25 to \$9 75; good \$10 50 to \$12; fine \$16 to \$18.

FLOUR—Richmond Canal \$4 12½; Scottsville \$4 25.

WHEAT—None arriving.

CORN—63 to 65 cents per bushel of 56 lbs.

OATS—45 to 50 cents per bushel.

GUANO—Peruvian \$50; Patagonia \$40.

PLASTER—Lump from wharf \$4 75 to \$5.

LIME \$1 25.

SALT \$1 65 to \$1 70.

Richmond, June 3, 1851.

NEW STYLE MEDALLION DAGUERREOTYPES IN COLORS.



This splendid improvement must be seen to be appreciated. Our friends are invited to call at the original VIRGINIA SKY-LIGHT DAGUERREAN GALLERY, where may be found all the latest improvements, consisting of the **CELEROTYPE**, by which infant children may be taken in one second;

TALBOTYPE, or Daguerreotype on Paper, and **HYALOTYPE**,

or Daguerreotypes on Glass, which, with every other improvement, may now be obtained at the Gallery, No. 139 Main street, above Governor.

N. B.—Their **NORTHERN COMBINATION SKY LIGHT** is now open in full operation—it is the largest in the State.

WM. A. PRATT & CO. Proprietors.

MEDALLION DAGUERREOTYPES IN COLORS.—We have inspected the above style of Daguerreotypes, lately and so successfully introduced here by Messrs. PRATT & Co., 132 Main street. By this process, a relief almost magical, and a variety highly pleasing, is obtained. In some cases, the picture so closely resembles an enamelled miniature, in its ivory tone, as to deceive even an artist; in others from the midst of a dark back ground, appears the "human face divine," in all the vividness of life; then, by still another process, the picture appears entirely upon a brilliant white ground, surrounded by wreaths of flowers. But, we feel our inability to do full justice to these beautiful medallion Daguerreotypes, and must, therefore, request the curious in such matters, to call and judge for themselves. Messrs. Pratt & Co. claim to be the first to introduce the sky-light system into the State, and appear to be constantly inventing something for the improvement of the art. Repair to their gallery and "secure the shadow ere the substance fades."—*Richmond Times*.

WILLIAM P. LADD,

APOTHECARY AND DRUGGIST,

No. 319, head of Broad Street, Shockoe Hill, Richmond, Virginia.

DEALER in English, Mediterranean, India and all Foreign and Domestic Drugs and Medicines; also, Paints, Oils, Varnish, Dye Stuffs, Window Glass, Putty, &c. For sale on the most accommodating terms.

Orders from Country Merchants and Physicians thankfully received and promptly attended to.

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